

MARCH 2, 2012 PROPOSED

Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE:

ISSUED TO

Severstal Dearborn, LLC

State Registration Number (SRN): A8640

LOCATED AT

4001 Miller Road, Dearborn, Michigan

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A8640-200X

Expiration Date:

Administratively Complete ROP Renewal Application Due Between and

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Michigan Air Pollution Control Rule 210(1), this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-A8640-200X

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Lynn Fiedler, AQD Assistant Division Chief

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a source-wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, or is state only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

This permit does not relieve the permittee from any responsibilities or obligations imposed on the permittee, at this source, under Consent Order SIP No. 30 - 1993 issued on November 2, 1994, Consent Order SIP No. 18-1993 issued on September 9, 1994 to Edw. C. Levy Co., and Consent Order Number 6-2006 issued on March 21, 2006, and Consent Order 9-2010 issued on April 23, 2010.

Severstal Dearborn LLC, A8640; and Edw. C. Levy Co., Plant 6, B4243 are considered to meet the criteria under Rule 336.1119(r) as single stationary source for purposes of the ROP program only, but were issued a separate ROP for the main slag processing plant as a result of negotiations.

A-1. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state only enforceable Source-wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in federally enforceable Source-wide PTI No. MI-PTI-A8640-201X pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq.,

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent opacity.
 - b. A limit specified by an applicable federal new source performance standard.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b))**:
- a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A responsible official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:

- a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**

28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.
37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, Part 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR, Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR, Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. ² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. ² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. ² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. ² **(R 336.1201(4))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B-1. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to Section 1 of the stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

**SOURCE-WIDE CONDITIONS
SECTION 1**

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	20%	3-minute average	Fugitive dust emissions from sources other than roads, lots, or storage piles. This shall not apply to storage pile material handling activities when wind speeds are in excess of 25 miles per hour.	Method 9D, VI.2	Act 451 Section 324.5524(2)
2. Visible Emissions	5%	3-minute average	Opacity of fugitive dust emissions from any road, lot or storage piles, including any material handling activity at a storage pile. This shall not apply to storage pile material handling activities when wind speeds are in excess of 25 miles per hour.	Method 9D, VI. 2	Act 451 Section 324.5524(2)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall implement and maintain the approved Fugitive Dust Control Plan as specified in Appendix 1-9 of this ROP. **(Act 451 Section 324.5524, Consent Order SIP 30-1993)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. At least 20% of the sources subject to testing requirements shall have been tested within one year of the effective date of the permit, at least 40% of the sources shall have been tested within two years of the effective date, at least 60% of the sources shall have been tested within three years of the effective date, at least 80% of the sources shall have been tested within four years of the effective date, and 100% of the sources shall have been tested within five years of the effective date. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep daily records of the information required by Appendix 1-4, Section 4.1(A-C) in a format consistent with SIP 30-1993. The permittee shall keep the record on file for a period of at least two years, and make the records available to AQD upon written or verbal request. **(Act 451 Section 324.5524, Consent Order SIP 30-1993, Exhibit A,5,H,Addendum, R 336.1213(3))**
2. The permittee shall perform a non-certified visible emission observation of the fugitive dust sources mentioned in Appendix 1-9 of this permit at least once per week during March through October. The permittee shall perform a certified visible emission observation of a representative set of the fugitive dust sources mentioned in Appendix 1-9 of this permit at least once per month during March through October. The representative set must include a paved road, an unpaved road, a storage pile and an unpaved open area. A different set of fugitive dust sources must be observed each month. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
3. The permittee shall implement and maintain the Hydrogen Sulfide Monitoring Protocol for Rule 406 submitted and approved by AQD on April 1, 2011 or any subsequent amendment to the protocol. Amendments to the protocol must be approved by the Southeast Michigan Air Quality Division (AQD) Supervisor. If, at any time, the AQD determines that the protocol is inadequate, the permittee shall amend the protocol within 45 days upon request from the AQD District Supervisor. **(R 336.1406(2), R 336.1213(3))**

See Appendix 1-4.1 and 1-9

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Quarterly report shall be submitted by the permittee to AQD identifying each day in which emission limit, operational requirement, or recording requirement, as specified in SIP No. 30-1993 (Revised 9/9/94) Exhibit A (Fugitive Dust Control Plan, Severstal Dearborn, LLC – Rouge Area Operations), is not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. **(Consent Order SIP 30-1993, Paragraph 11)**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The conditions contained in this RO Permit for which a Consent Order is the only identified applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of the conditions as the date upon which the Termination Order is signed by the Chief of the Air Quality Division or by an authorized U.S. Environmental Protection Agency representative. **(R 336.1213(3))**
2. The conditions contained in this RO Permit for which a Consent Judgment or Consent Decree is the only identified applicable requirement shall be considered null and void upon the effective date of termination of the Consent Judgment or Decree. The effective date of termination is defined for the purposes of the conditions as the date upon which a Stipulation and Order for Termination is signed by a Circuit Court Judge or by a United States District Court Judge or Magistrate Justice. **(R 336.1213(3))**
3. Each responsible official shall certify annually the compliance status of the stationary source with all stationary source-wide conditions. This certification shall be included as part of the annual certification of compliance as required in the General Conditions in Part A and Rule 213(4)(c). **(R 336.1213(4)(c))**
4. When the odor of hydrogen sulfide is found to exist beyond the property line of Severstal Dearborn, LLC, the permittee shall not cause or allow the concentration of hydrogen sulfide to exceed 0.005 parts per million by volume for a maximum period of 2 minutes. **(R 336.1406(2))**
5. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR, Part 63, Subparts A and ZZZZ)**
6. The permittee shall comply with all applicable provisions of the New Source Performance Standards, as specified in 40 CFR, Part 60, Subpart A and Subpart IIII, for Stationary Compression Ignition Internal Combustion Engines by the initial compliance date. **(40 CFR Part 60, Subparts A and IIII)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

C-1. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUCOALHANDLING	Pulverized coal silo. Equipped with 1 baghouse at the present (total of 4 baghouses required by the PTI if emission unit installation completed)	1-1-2008	NA
EUCOKESCRNBLDGDD	Coke screening building DD	1-1-1950	NA
EURAWMATHANDLING	Raw material handling system	1-1-1997	NA
EUBFCESTOVE	Blast Furnace B stove	1-1-1922	FGB&CSTOVES
EUBBFCASTHOUSE	B Furnace cast house operations	1-1-1922	FGB&CCASTHOUSES
EUBBFBLEEDERS	B Blast Furnace bleeders	1-1-1922	NA
EUCFCESTOVE	Blast Furnace C stove	1-1-1948/ 10-01-2007	FGB&CSTOVES
EUCBFCASTHOUSE	C Blast Furnace cast house operations	1-1-1948/ 10-01-2007	FGB&CCASTHOUSES
EUCBFBLEEDERS	C Blast Furnace bleeders	1-1-1948	NA
EUTREADWELLDRYOUT	Treadwell car dry out operation	1-1-1997	NA
EURELADLINGBOF	Reladling south & north – BOF	1-1-1975	FGBOFSHOP
EUDESULFURIZATN	Desulfurization operation	1-1-1981	NA
EUDESULFWATERING	BOF desulfurization by-product material “desulf” watering station located at the south end of the BOF building. Levy or any other winning bidder in the future for the service, digs the desulf materials with a front-end loader, brings them to an open area for cooling using water spray and for fugitive dust control. After thorough cooling, Levy or any other winning bidder in the future for the service, loads the materials into trucks for processing off site. Note: Levy currently has the contract to buy this material and, consequently, currently operates the Desulf Watering Station.	4-17-95	NA
EUBOF	Basic oxygen furnace (BOF), two vessels.	1-1-1964	FGBOFSHOP
EULADLEREFINE1	No. 1 Ladle refining facility	1-1-1990	NA
EULADLEREFINE2	No. 2 Ladle refining facility	1-1-1995	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUVACUUMDEGASSER	Vacuum degasser	1-1-1990	NA
EUHANDSCARFING	Hand scarfing operations	1-1-1986	NA
EUSREHEATFURNACE1	Slab reheat furnace 1	1-1-1979	FGREHEATFURN123
EUSREHEATFURNACE2	Slab reheat furnace 2	1-1-1974	FGREHEATFURN123
EUSREHEATFURNACE3	Slab reheat furnace 3	1-1-1974	FGREHEATFURN123
EUHCLSTORAGESCRU	Hydrochloric acid storage tanks scrubber	9-1-1997	NA
EUPICKLINSRUBS	Three pickle lines Numbers 1, 3, and 4. Total flow rate is 120,000 acfm.	1-1-1967	NA
EUANNEALFURNACES	52 annealing furnaces. (34 hydrogen nitrogen annealing furnaces, and 18 hydrogen annealing furnaces)	NA	NA

**EU COAL HANDLING
EMISSION UNIT CONDITIONS**

DESCRIPTION Pulverized coal silo

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Baghouses

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.005 gr/dscf ²	NA	Fine coal silo baghouse	VI.1, VI.2	40 CFR 52.21(b)(3), R336.1331(1)(c)
2. PM-10	0.005 gr/dscf ²	NA	Fine coal silo baghouse	VI.1, VI.2	R336.1205(1)(a) & (b)
3. Visible Emissions	10% ²	6 minute average	Fine coal silo baghouse	Method 9, VI.1, VI.2	R336.1301(1)(c)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not load coal into the fine coal silo unless the baghouse is installed, maintained, and operated in a satisfactory manner². (R 336.1205(1)(a) & (b), R 336.1301, R 336.1331(1)(c), R 336.1910, 40 CFR 52.21(b)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall perform a Method 9 certified visible emission observation of the fine coal silo baghouse at least once a month during processing activity. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken². (R 336.1910)

2. Permittee shall periodically inspect the fine coal silo baghouse to determine the operational and physical condition of the baghouse at least once per month, and immediately after observing visible emissions in excess of the applicable limitation. The baghouse shall be inspected as necessary immediately after a malfunction or failure of the baghouse or the process equipment to determine the reason for the malfunction or failure. Written records of each inspection and corrective action taken, if any, shall be maintained². **(R 336.1910)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUCOKESCRNBLDGDD
EMISSION UNIT CONDITIONS**

DESCRIPTION Coke screening building DD

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	20%	6 minute average	Baghouse stack	Method 9, VI.1	R 336.1301(1)(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct visible emission readings by a certified Method 9 observer of visible emissions from the coke screening building baghouse stack at least once a month during coke screening activities. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action.
(R 336.1213(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The Coke Screening Building DD shall be evacuated through a baghouse. **(SIP No. 30-1993, Exhibit A, Section 5(B), Paragraphs (1) and (2))**
2. All coke handling conveyors shall be totally enclosed or covered with a 180 degree cover. **(SIP No. 30-1993, Exhibit A, Section 5(F), Paragraph (1))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EURAWMATHANDLING
EMISSION UNIT CONDITIONS**

DESCRIPTION Raw material handling system

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	1. 1.0 lb/hr ²	Test Protocol	Baghouse stack	General Condition 13, VI.1, VI.3	R 336.1331(1)(c)
	2. 4.39 tons per year ²	Annually	Baghouse stack	General Condition 13, VI.1, VI.3	R 336.1331(1)(c)
2. Visible Emissions	1. 10% ²	6-minute average	Baghouse stack	Method 9, VI.1, VI.2, VI.3	R 336.1201(3)
	2. No visible emissions ²	6-minute average	Conveyors, storage bins or raw material handling building	VI.2, III.2	R 336.1201(3)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the stockhouse unless the baghouse is installed and operated properly². (R 336.1201(3), R 336.1910)
2. The permittee shall not operate the automated raw material handling system unless the fugitive dust control plan has been implemented and maintained². (R 336.1201(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. Permittee shall monitor and record pressure drop across the baghouse weekly. A pressure drop of between 2 and 6 inches w.c. shall be considered normal and can be changed upon the request of the permittee, with the approval of the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop exceeds the normal range. **(R 336.1213(3))**
2. The permittee shall perform a Method 9 certified visible emission observation of the raw material handling baghouse, conveyors, storage bins, and building at least once a month during processing activity. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
3. The permittee shall periodically inspect the baghouse to determine the operational and physical condition of the baghouse at least once per month and immediately after observing visible emissions in excess of the applicable limitation. The baghouse will be inspected as necessary immediately after a malfunction or failure of the baghouse or the process equipment to determine the reason for the malfunction or failure. Written records of each inspection and corrective action taken, if any, shall be maintained. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed horizontally to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVRAWMATHANDLING	36 ²	51 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUBFCESTOVE
EMISSION UNIT CONDITIONS**

DESCRIPTION B Blast Furnace stoves

Flexible Group ID: FGB&CSTOVES

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	1. 36.0 lb/hr ²	Test protocol	EUBFCESTOVE	V.1, VI.4	R 336.1205(1)(a) & (b)
	2. 136.6 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUBFCESTOVE	VI.1, VI.2	R 336.1205(1)(a) & (b)
2. SO ₂	70.9 lb/hr ²	Test protocol	EUBFCESTOVE	V.1	40 CFR 52.21(c) & (d), 40 CFR 52.21(j)
3. CO	661.1 lb/hr ²	Test Protocol	EUBFCESTOVE	V.1, VI.3	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUBFCESTOVE unless the low-NO_x technology is installed, maintained, and operated in a satisfactory manner². (R 336.1205(1)(a) & (b), R 336.1910)
2. The permittee shall not fire blast furnace gas in EUBFCESTOVE unless the scrubber and mechanical collector for pre-combustion gas cleaning are installed, maintained, and operated in a satisfactory manner². (R 336.1205(1)(a) & (b), R 336.1910, 40 CFR 52.21(b)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVBSTOVE is 750F². (R 336.1225, 40 CFR 52.21(c) & (d))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct NO_x, SO₂, and CO emission tests of the B Blast Furnace stove stack once during the term of this permit. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep, in a satisfactory manner, daily fuel usage records for EUBFCESTOVE². **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3), (c), & (d))**
2. The permittee shall determine compliance with emission limit in I.1.2 of this section by establishing emission factors based upon the BFCE stove stack testing and applying that emission factor to the daily fuel usage recorded in VI.1 of this section, as outlined in Appendix 1-7.1². **(R 336.1205(1)(a) & (b))**
3. The permittee shall determine compliance with the emission limit in I.3 of this section by establishing an emission factor based upon the BFCE stove stack CO testing and applying that emission factor to the daily fuel usage recorded in VI.1 of this section, as outlined in Appendix 1-7.1². **(40 CFR 52.21 (d))**
4. The permittee shall periodically inspect the installed stove burners of the EUBFCESTOVE, and the scrubber and mechanical collector for pre-combustion gas cleaning of the EUBFCESTOVE to determine its operational and physical condition at least once per month and immediately after observing unsatisfactory condition. Written records of each inspection and corrective action taken, if any, shall be maintained. **(R 336.1213(3))**

See Appendix 1-7.1

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.SVBSTOVE	99 ²	190 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUBBFCASTHOUSE
EMISSION UNIT CONDITIONS**

DESCRIPTION B Blast Furnace cast house operations

Flexible Group ID: FGB&CCASTHOUSES

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	1. 0.003 gr/dscf ²	Test Protocol	Baghouse stack	V.8, VI.3, VI.26	40 CFR 52.21(b)(3), R 336.1331(1)(c)
	2. 0.01 gr/dscf ²	Test protocol	Baghouse stack	V.1, VI.7, VI.12	40 CFR 63 Subpart FFFFF
	3. 5.59 lb/hr ²	Test protocol	Baghouse stack	V.8, VI.25	40 CFR 52.21(b)(3)
2. PM-10	1. 0.0015 gr/dscf ²	Test protocol	Baghouse stack	V.8, VI.3, VI.26	R 336.1205(1)(a) & (b)
	2. 2.85 lb/hr ²	Test protocol	Baghouse stack	V.8, VI.3, VI. 26	R 336.1205(1)(a) & (b)
3. Opacity	20% ²	6-minute average	Roof monitors	Method 9, VI.2	R 336.1358(1)
4. Opacity	20%	6-minute average	Any opening in cast house	Method 9, V.1, V.2	40 CFR 63.7790(a)
5. Opacity	10% ²	6-minute average	Baghouse stack	Method 9, VI.3,	R 336.1361(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the B Blast Furnace Cast House unless the baghouse is installed, maintained, and operated in a satisfactory manner². (**R 336.1205(1)(a) & (b), R 336.1225, R 336.1331(1)(c), R 336.1910, 40 CFR 52.21(b)(3), MDEQ Consent Order AQD No. 6-2006 Paragraph 10(B)(ii)**)
2. The B Blast Furnace Cast House shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions. (**40 CFR 63.7800(a), 40 CFR 63.6(e)(1)(i)**)
3. The permittee shall develop and implement a written startup, shutdown and malfunction plan for the B Blast Furnace Cast House. (**40 CFR 63.7810(c), 40 CFR 63.7835(b) and 40 CFR 63.6(e)(3)**)

4. The permittee shall provide the B blast furnace casthouse baghouse capture system design plans and a signed certification from the designer, certifying that the baghouse capture system is designed to achieve no less than 98% collection efficiency². **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVBFCE is 150F¹. **(R 336.1225)**
2. The design air flow rate of the SVBFCE is 250 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct performance tests for particulate matter emissions and opacity at least once per permit term. **(40 CFR 63.7821)**
2. The permittee shall demonstrate compliance with the opacity limitation in I.4 of this section with a certified observer of Method 9 visible emissions using Method 9. The performance test for visible emissions shall consist of 30 6-minute block averages during tapping of the furnace. **(40 CFR 63.7823(c)(1) and (2))**
3. The permittee shall maintain records of visible emissions observations required by 40 CFR Part 63, Subpart FFFFF. **(40 CFR 63.7842(c))**
4. The permittee shall sample for an integral number of furnace tapping operations to obtain at least 1 hour of sampling for each test run. **(40 CFR 63.7822(e))**
5. Performance tests for visible emissions shall be conducted such that the opacity observations overlap with the performance tests for particulate. **(40 CFR 63.7823(b))**
6. The permittee shall certify that the baghouse capture system operated during the performance test at the site-specific operating limits established in the operation and maintenance plan using the following procedures: **(40 CFR 63.7824(a))**
 - a. Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in the capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a). **(40 CFR 63.7824(a)(1))**
 - b. For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position shall be visually checked and recorded at the beginning and end of each opacity observation period segment. **(40 CFR 63.7824(a)(2))**
 - c. Review and record the monitoring data and identify and explain any times the capture system operated outside the applicable operating limits. **(40 CFR 63.7824(a)(3))**
 - d. Certify in the performance test report that during all observation period segments, the capture system was operating at the values or settings established in the capture system operation and maintenance plan. **(40 CFR 63.7824(a)(4))**
7. The permittee may change the operating limits for the baghouse capture system if the following requirements are met: **(40 CFR 63.7824(d))**
 - a. Submit a written notification to the Administrator requesting to conduct a new performance test to revise the operating limit. **(40 CFR 63.7824(d)(1))**
 - b. Conduct a performance test to demonstrate compliance with the applicable operating limitation. **(40 CFR 63.7824(d)(2))**

- c. Establish revised operating limits according to the applicable procedures in 40 CFR 63.7824, paragraphs (a) through (c) for a capture system. **(40 CFR 63.7824(d)(3))**
8. The permittee shall conduct performance tests for the PM10 and particulate matter emission limits in Section I at least once per permit term. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If applicable, the permittee shall install, maintain, and operate a Continuous Parametric Monitoring System (CPMS) for the baghouse capture system according to the requirements of 40 CFR 63.7830(a) and 40 CFR 63.7831(e). **(40 CFR 63.7830(a))**
2. The permittee shall perform non-certified visible emission observation for the roof monitors at least once a week during blast furnace processing activity and a Method 9 certified visible emission observation of roof monitors at least once every month during blast furnace processing activity. If visible emissions are observed during the non-certified observation, a Method 9 certified visible emission observation will be performed at that time. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1358(1))**
3. The permittee shall perform a Method 9 visible emission observation for the blast furnace baghouse stack at least once a month during blast furnace processing activity. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
4. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7842(a)(1))**
5. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
6. The permittee shall maintain records associated with performance tests, and performance evaluations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**
7. Except as allowed in VI.10 permittee shall install, operate, and maintain a bag leak detection system meeting the following specifications on the baghouse control: **(40 CFR 63.7831(f))**
 - a. Certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic foot (0.0044 grains per actual cubic foot). **(40 CFR 63.7831(f)(1))**
 - b. Provides output of relative changes in particulate matter loadings. **(40 CFR 63.7831(f)(2))**
 - c. Is equipped with an alarm, located such that it is heard by appropriate plant personnel, that sounds an alarm when an increase in relative particulate loadings is detected over a preset level. **(40 CFR 63.7831(f)(3))**
 - d. Initially adjusted by establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device and setting the alarm set points and alarm delay time. **(40 CFR 63.7831(f)(5))**
8. Following the initial adjustment of the bag leak detection system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as specified in the operation and maintenance plan. This requirement does not apply if the permittee installs a COMS as specified in VI.10. **(40 CFR 63.7831(f)(6))**
9. If the sensitivity of the bag leak detection system is changed beyond the limits established pursuant to 40 CFR 63.7831(f)(6), a copy of a written certification by a responsible official shall be included in the semiannual

compliance report for that period. This requirement does not apply if the permittee installs a COMS as specified in VI.10. **(40 CFR 63.7833(c)(2))**

10. If permittee does not install and operate a bag leak detection system, the permittee shall install, operate, and maintain a COMS according to the requirements in 40CFR Sec. 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7832)**
11. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**
12. The permittee shall monitor the pressure drop across each baghouse compartment daily to ensure that the pressure drop is within the normal operating range identified in the manual. **(40 CFR 63.7830(b)(1))**
13. The permittee shall confirm that dust is being removed from hoppers on a weekly basis through visual observations or other means of determining the proper functioning of the removal mechanisms. **(40 CFR 63.7830(b)(2))**
14. The permittee shall confirm that the compressed air supply to the pulse-jet baghouse is operating properly on a daily basis. **(40 CFR 63.7830(b)(3))**
15. The permittee shall monitor the cleaning cycles of the baghouse to ensure proper operation using appropriate technology. **(40 CFR 63.7830(b)(4))**
16. The permittee shall check the bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means. **(40 CFR 63.7830(b)(5))**
17. The permittee shall inspect the baghouse to confirm the physical integrity of the baghouse through quarterly inspections of the interior of the baghouse for air leaks. **(40 CFR 63.7830(b)(7))**
18. The permittee shall inspect fans for wear, material buildup, and corrosion on a quarterly basis using visual inspections, vibration detectors, or equivalent means. **(40 CFR 63.7830(b)(8))**
19. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**
20. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 63.7832(b))**
21. The permittee shall prepare, and operate at all times according to, a written operation and maintenance plan for the baghouse capture system. The plan shall address each of the following: **(40 CFR 63.7800(b))**
 - a. Weekly inspections of the equipment that is important to the performance of the total capture system, including, but not limited to, observations of the physical appearance of the equipment and requirements to repair any defect or deficiency in the capture system before the next scheduled inspection; **(R 336.1301, R 336.1358(1), 40 CFR 63.7800(b)(1))**
 - b. Operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system including, but not limited to, operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. **(40 CFR 63.7800(b)(3))**

22. If applicable, the permittee shall monitor the hourly average actual volumetric flow rate through each separately ducted hood and the average hourly total volumetric flow rate at the inlet to the baghouse according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7830(a))**
23. If applicable, the permittee shall develop and make available for inspection upon request by AQD a site-specific monitoring plan that addresses all of the following requirements for the baghouse capture system: **(40 CFR 63.7831(a))**
 - a. Installation of the CPMS sampling probe or other interface at a measurement location relative to each hooded emission point such that the measurement is representative of capture of the exhaust emissions; **40 CFR 63.7831(a)(1))**
 - b. Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system; **(40 CFR 63.7831(a)(2))**
 - c. Performance evaluation procedures and acceptance criteria; **(40 CFR 63.7831(a)(3))**
 - d. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8); **(40 CFR 63.7831(a)(4))**
 - e. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and; **(40 CFR 63.7831(a)(5))**
 - f. Ongoing recordkeeping and reporting procedures in accordance the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). **(40 CFR 63.7831(a)(6))**
24. If applicable, the permittee shall operate and maintain the capture system CPMS in continuous operation according to the site-specific monitoring plan. Unless otherwise specified, the CPMS shall: **(40 CFR 63.7831(b))**
 - a. Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data; **(40 CFR 63.7831(b)(1))**
 - b. Provide valid hourly data for at least 95 percent of every averaging period; and **(40 CFR 63.7831(b)(2))**
 - c. Determine and record the hourly average of all recorded readings. **(40 CFR 63.7831(b)(3))**
25. The permittee shall operate the baghouse capture system at or above the lowest value or settings established for the operating limits in the operation and maintenance plan and collect, reduce, and record the monitoring data for each of the operating limit parameters. **(40 CFR 63.7833(b))**
26. The permittee shall record the pressure drop across the B Blast Furnace baghouse, daily. A pressure drop of between 2 and 14 inches w.c. shall be considered normal and can be changed upon request of permittee, with the approval of the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop is outside the normal range. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c)).**

4. Permittee shall report the results of the initial performance test in the notification of compliance status. **(40 CFR 63.7820(a), 40 CFR 63.7825(c) and 40 CFR 63.7840(e))**
5. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
6. Any time an action taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBBFROOFMONEAST	NA ¹	75.2 ¹	R 336.1225
2. SVBBFROOFMONWEST	NA ¹	75.2 ¹	R 336.1225
3. SVBFCE	111 ¹	200 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. Records required under 40 CFR Part 63, Subpart FFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be keep offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUBBFBLEEDERS
EMISSION UNIT CONDITIONS**

DESCRIPTION B Blast Furnace bleeders

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20%	6 minute average	EUBBFBLEEDERS	Method 9, V.1	R 336.1301(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. For discharges from the bleeder stack during daylight hours during a “cold shutdown” and the associated cold startup, observations shall begin at the start of the discharge and continue for one hour or until the discharge ceases, whichever occurs first. A “cold shutdown” shall be defined as a planned shutdown intended to result in removing essentially all charged materials and product from the furnace to allow entry of personnel to the furnace interior below the bustle pipe level. (R 336.1301(1), R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. When discharges that require observation occur from the bleeder stack during daylight hours, permittee shall record the following:
 - a. Date
 - b. Start time
 - c. Stop time
 - d. Duration of discharge
 - e. Reason(s) for discharge
 - f. Steps that have been taken or will be taken to minimize future discharges.(R 336.1213(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUCFCESTOVE
EMISSION UNIT CONDITIONS**

DESCRIPTION C Blast Furnace stoves

Flexible Group ID: FGB&CSTOVE

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	1. 106.3 lb/hr ²	Test protocol	EUCFCESTOVE	V.1, VI.4	R 336.1205(1)(a) & (b)
	2. 439.18 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUCFCESTOVE	V.1, VI.3, VI.4	R 336.1205(1)(a) & (b)
2. SO ₂	1. 275.1 lb/hr ²	Based on a 24 hour average	EUCFCESTOVE	VI.1	40 CFR 52.21(c) & (d), 40 CFR 52.21(j)
	2. 1096.1 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUCFCESTOVE	VI.1	40 CFR 52.21(j)
3. CO	1. 2195.5 lb/hr ²	Test protocol	EUCFCESTOVE	V.1	40 CFR 52.21(d) & (j)
	2. 8760 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUCFCESTOVE	VI.3	40 CFR 52.21(d) & (j)
4. PM	14.16 lb/hr ²	Test protocol	EUCFCESTOVE	V.1	40 CFR 52.21(b)(3), R 336.1331(1)(c)
5. PM-10	14.16 lb/hr ²	Test protocol	EUCFCESTOVE	V.1	R 336.1205(1)(a) & (b)
6. Mn	0.0154 lb/hr ¹	Test protocol	EUCFCESTOVE	V.1	R 336.1225
7. Hg	0.000414 lb/hr ¹	Test protocol	EUCFCESTOVE	V.1	R 336.1201(3), R 336.1228, R 336.1901
8. Pb	0.0141 lb/hr ²	Test protocol	EUCFCESTOVE	V.1	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUCFCESTOVE unless the low-NO_x technology is installed, maintained, and operated in a satisfactory manner². **(R 336.1205(1)(a) & (b), R 336.1910)**
2. The permittee shall not fire blast furnace gas in EUCFCESTOVE unless the venturi scrubber and mechanical collector for pre-combustion gas cleaning are installed, maintained, and operated in a satisfactory manner². **(R 336.1205(1)(a) & (b), R 336.1910, 40 CFR 52.21(b)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVCSTOVE is 750F². **(R 336.1225, 40 CFR 52.21(c)&(d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct NO_x, CO, PM, PM-10, Mn, Hg, and Pb emission tests of the C Blast Furnace stove stack at least once during the term of this permit. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall calibrate, maintain and operate in a satisfactory manner a device to monitor and record the SO₂ emissions from EUCFCESTOVE on a continuous basis. The permittee shall operate each CEM system to meet the requirements and reporting detailed in Appendix 1-3.1, and shall use the CEM data for determining compliance with I.2.1 and I.2.2 of this section². **(R 336.1205, 40 CFR 52.21 (c), (d), & (j))**
2. The permittee shall keep, in a satisfactory manner, daily fuel usage records for FGB&CSTOVES. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request². **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3), (c), & (d))**
3. The permittee shall determine compliance with the emission limits in I.1.2 and I.3.2 of this section by establishing emission factors based upon the EUCFCESTOVE stack testing and applying these emission factors to the daily fuel usage recorded in VI.2, as outlined in Appendix 1-7.3². **(R 336.1205(1)(a) & (b), 40 CFR 52.21 (d))**
4. The permittee shall periodically inspect the installed stove burners of the EUCFCESTOVE, and the scrubber and mechanical collector for pre-combustion gas cleaning of the EUCFCESTOVE to determine its operational and physical condition at least once per month and immediately after observing unsatisfactory condition. Written records of each inspection and corrective action taken, if any, shall be maintained. **R 336.1213(3)**

See Appendices 1-3.1 and 1-7.3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.SVCSTOVE	129 ²	210 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall maintain a complete copy of the coke analysis, including the sulfur content, as supplied by the coke vendor, for each shipment of coke. All records shall be kept on file for a period of at least five years and made available to the Department upon request². **(R 336.1225, 40 CFR 52.21(c) & (d))**
2. The permittee shall maintain a complete copy of the coal analysis, including the sulfur content, as supplied by the coal vendor, for each shipment of coal. All records shall be kept on file for a period of at least five years and made available to the Department upon request². **(R 336.1225, 40 CFR 52.21(c) & (d))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUCBFCASTHOUSE
EMISSION UNIT CONDITIONS**

DESCRIPTION C Blast Furnace cast house operations

Flexible Group ID: FGB&CCASTHOUSES

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	1. 0.003 gr/dscf ²	Test Protocol	Baghouse stack	V.9, VI.3, VI.28	40 CFR 52.21(b)(3), R 336.1331(1)(c)
	2. 0.01 gr/dscf	Test protocol	C FCE cast house	V.1, VI.7, VI.12	40 CFR 63 Subpart FFFFF
	3. 11.17 lb/hr ²	Test protocol	C FCE cast house	V.9	40 CFR 52.21(b)(3)
2. PM-10	1. 0.0015 gr/dscf ²	Test protocol	Baghouse stack	V.9, VI.3, VI. 28	R 336.1205(1)(a) & (b)
	2. 5.70 lb/hr ²	Test protocol	Baghouse stack	V.9	R 336.1205(1)(a) & (b)
3. Opacity	20% ²	6-minute average	Cast house roof monitors	Method 9, VI.2	R 336.1358(1)
4. Secondary emissions	20%	6-minute average	Any opening in the cast house	Method 9, V.2	40 CFR 63.7790(a)
5. Opacity	10% ²	6-minute average	Baghouse stack	Method 9, VI.3	R 336.1361
6. SO ₂	1. 23.03 lb/hr ²	Test protocol	Baghouse stack	General Condition 13, Approved Method	40 CFR 52.21(c) & (d), 40 CFR 52.21(j)
	2. 91.79 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Baghouse stack	General Condition 13, Approved Method, VI. 27	40 CFR 52.21(c), (d) & (j)
7. NO _x	1. 2.45 lb/hr ²	Test protocol	Baghouse stack	General Condition 13, Approved Method	R336.1205(1)(a) & (b)
	2. 9.77 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Baghouse stack	General Condition 13, Approved Method, VI. 27	R336.1205(1)(a) & (b)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
8. VOC	6.77 lb/hr ²	Test protocol	Baghouse stack	General Condition 13, Approved Method	R 336.1702(a)
9. Mn	0.00256 lb/hr ¹	Test protocol	Baghouse stack	General Condition 13, Approved Method	R 336.1225
10. Pb	0.00015 lb/hr ²	Test protocol	Baghouse stack	General Condition 13, Approved Method	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. C Blast Furnace Cast House shall not be operated unless the baghouse is installed, maintained and operated in a satisfactory manner². **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1331(1)(c), R 336.1910, 40 CFR 52.21(b)(3))**
2. The permittee shall keep on file a copy of the CFCE baghouse capture system design plans and a signed certification from the designer, certifying that the baghouse capture system is designed to achieve no less than 98% collection efficiency². **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3))**
3. The C Blast Furnace Cast House shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 63.7800(a) and 40 CFR 63.6(e)(1)(i))**
4. The permittee shall develop and implement a written startup, shutdown and malfunction plan for the C Blast Furnace Cast House. **(40 CFR 63.7810(c), 40 CFR 63.7835(b) and 40 CFR 63.6(e)(3))**
5. The iron production from C Blast Furnace Casthouse shall not exceed a maximum of 10,000 tons per day based on a calendar week average². **(R 336.1225, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVCFCE is 150F¹. **(R 336.1225)**
2. The design air flow rate of the SVCFCE is 500,000 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct performance tests for particulate matter emissions and opacity at least once per permit term. **(40 CFR 63.7821)**

2. The permittee shall demonstrate compliance with the opacity limitation in I.4 with a certified observer of Method 9 visible emissions using Method 9. The performance test for visible emissions shall consist of 30 6-minute block averages during tapping of the furnace. **(40 CFR 63.7823(c)(1) and (2))**
3. The permittee shall maintain records of visible emissions observations required by 40 CFR Part 63, Subpart FFFFF. **(40 CFR 63.7842(c))**
4. The permittee shall sample for an integral number of furnace tapping operations to obtain at least 1 hour of sampling for each test run. **(40 CFR 63.7822(e))**
5. Performance tests for visible emissions shall be conducted such that the opacity observations overlap with the performance tests for particulate. **(40 CFR 63.7823(b))**
6. The permittee shall obtain an analysis of the C Blast Furnace Casthouse baghouse dust once per calendar quarter, or less frequently if approved in writing by the Air Quality Division. The analysis shall determine the percentage of Pb and Mn in the collected PM dust from the baghouse². **(R 336.1225, R 336.1228, 40 CFR 52.21(d))**
7. The permittee shall certify that the baghouse capture system operated during the performance test at the site-specific operating limits established in the operation and maintenance plan using the following procedures: **(40 CFR 63.7824(a))**
 - a. Concurrent with all opacity observations, measure and record values for each of the operating limit parameters in the capture system operation and maintenance plan according to the monitoring requirements specified in §63.7830(a). **(40 CFR 63.7824(a)(1))**
 - b. For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position shall be visually checked and recorded at the beginning and end of each opacity observation period segment. **(40 CFR 63.7824(a)(2))**
 - c. Review and record the monitoring data and identify and explain any times the capture system operated outside the applicable operating limits. **(40 CFR 63.7824(a)(3))**
 - d. Certify in the performance test report that during all observation period segments, the capture system was operating at the values or settings established in the capture system operation and maintenance plan. **(40 CFR 63.7824(a)(4))**
8. The permittee may change the operating limits for the baghouse capture system if the following requirements are met: **(40 CFR 63.7824(d))**
 - a. Submit a written notification to the Administrator requesting to conduct a new performance test to revise the operating limit. **(40 CFR 63.7824(d)(1))**
 - b. Conduct a performance test to demonstrate compliance with the applicable operating limitation. **(40 CFR 63.7824(d)(2))**
 - c. Establish revised operating limits according to the applicable procedures in 40 CFR 63.7824, paragraphs (a) through (c) for a capture system. **(40 CFR 63.7824(d)(3))**
9. The permittee shall conduct performance tests for PM₁₀ and particulate matter emission limits in Section I at least once per permit term. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If applicable, the permittee shall install, maintain, and operate a Continuous Parametric Monitoring System (CPMS) for the baghouse capture system according to the requirements of 40 CFR 63.7830(a) and 40 CFR 63.7831(e). **(40 CFR 63.7830(a))**
2. The permittee shall perform non-certified visible emission observation for the roof monitors at least once a week during blast furnace processing activity and a Method 9 certified visible emission observation of roof

monitors at least once every month during blast furnace processing activity. If visible emissions are observed during the non-certified observation, a Method 9 certified visible emission observation will be performed at that time. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1358(1))**

3. The permittee shall perform a Method 9 visible emission observation for the blast furnace baghouse stack at least once a month during blast furnace processing activity. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
4. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv)). **(40 CFR 63.7842(a)(1))**
5. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
6. The permittee shall maintain records associated with performance tests, and performance evaluations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**
7. Except as allowed in VI.10 of this section, permittee shall install, operate, and maintain a bag leak detection system meeting the following specifications on the baghouse control: **(40 CFR 63.7831(f))**
 - a. Certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic foot (0.0044 grains per actual cubic foot). **(40 CFR 63.7831(f)(1))**
 - b. Provides output of relative changes in particulate matter loadings. **(40 CFR 63.7831(f)(2))**
 - c. Is equipped with an alarm, located such that it is heard by appropriate plant personnel, that sounds an alarm when an increase in relative particulate loadings is detected over a preset level. **(40 CFR 63.7831(f)(3))**
 - d. Initially adjusted by establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device and setting the alarm set points and alarm delay time. **(40 CFR 63.7831(f)(5))**
8. Following the initial adjustment of the bag leak detection system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as specified in the operation and maintenance plan. This requirement does not apply if the permittee installs a COMS as specified in VI.10 of this section. **(40 CFR 63.7831(f)(6))**
9. If the sensitivity of the bag leak detection system is changed beyond the limits established pursuant to 40 CFR 63.7831(f)(6), a copy of a written certification by a responsible official shall be included in the semiannual compliance report for that period. This requirement does not apply if the permittee installs a COMS as specified in VI.10 of this section. **(40 CFR 63.7833(c)(2))**
10. If permittee does not install and operate a bag leak detection system, the permittee shall install, operate, and maintain a COMS according to the requirements in 40 CFR Sec. 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7832)**
11. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**
12. The permittee shall monitor the pressure drop across each baghouse compartment daily to ensure that the pressure drop is within the normal operating range identified in the manual. **(40 CFR 63.7830(b)(1))**
13. The permittee shall confirm that dust is being removed from hoppers on a weekly basis through visual observations or other means of determining the proper functioning of the removal mechanisms. **(40 CFR 63.7830(b)(2))**

14. The permittee shall confirm that the compressed air supply to the pulse-jet baghouse is operating properly on a daily basis. **(40 CFR 63.7830(b)(3))**
15. The permittee shall monitor the cleaning cycles of the baghouse to ensure proper operation using appropriate technology. **(40 CFR 63.7830(b)(4))**
16. The permittee shall check the bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means. **(40 CFR 63.7830(b)(5))**
17. The permittee shall inspect the baghouse to confirm the physical integrity of the baghouse through quarterly inspections of the interior of the baghouse for air leaks. **(40 CFR 63.7830(b)(7))**
18. The permittee shall inspect fans for wear, material buildup, and corrosion on a quarterly basis using visual inspections, vibration detectors, or equivalent means. **(40 CFR 63.7830(b)(8))**
19. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**
20. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 63.7832(b))**
21. The permittee shall prepare, and operate at all times according to, a written operation and maintenance plan for the baghouse capture system. The plan shall address each of the following: **(40 CFR 63.7800(b))**
 - a. Weekly inspections of the equipment that is important to the performance of the total capture system, including, but not limited to, observations of the physical appearance of the equipment and requirements to repair any defect or deficiency in the capture system before the next scheduled inspection; **(R 336.1301, R 336.1358(1), 40 CFR 63.7800(b)(1))**
 - b. Operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system including, but not limited to, operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. **(40 CFR 63.7800(b)(3))**
22. If applicable, the permittee shall monitor the hourly average actual volumetric flow rate through each separately ducted hood and the average hourly total volumetric flow rate at the inlet to the baghouse according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7830(a))**
23. If applicable, the permittee shall develop and make available for inspection upon request by AQD a site-specific monitoring plan that addresses all of the following requirements for the baghouse capture system: **(40 CFR 63.7831(a))**
 - a. Installation of the CPMS sampling probe or other interface at a measurement location relative to each hooded emission point such that the measurement is representative of capture of the exhaust emissions; **(40 CFR 63.7831(a)(1))**
 - b. Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system; **(40 CFR 63.7831(a)(2))**
 - c. Performance evaluation procedures and acceptance criteria; **(40 CFR 63.7831(a)(3))**
 - d. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8); **(40 CFR 63.7831(a)(4))**
 - e. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and **(40 CFR 63.7831(a)(5))**

- f. Ongoing recordkeeping and reporting procedures in accordance the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). **(40 CFR 63.7831(a)(6))**
- 24. If applicable, the permittee shall operate and maintain the capture system CPMS in continuous operation according to the site-specific monitoring plan. Unless otherwise specified, the CPMS shall: **(40 CFR 63.7831(b))**
 - a. Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data; **(40 CFR 63.7831(b)(1))**
 - b. Provide valid hourly data for at least 95 percent of every averaging period; and **(40 CFR 63.7831(b)(2))**
 - c. Determine and record the hourly average of all recorded readings. **(40 CFR 63.7831(b)(3))**
- 25. The permittee shall operate the baghouse capture system at or above the lowest value or settings established for the operating limits in the operation and maintenance plan and collect, reduce, and record the monitoring data for each of the operating limit parameters. **(40 CFR 63.7833(b))**
- 26. The permittee shall keep a daily record of the amount of iron cast from the furnace². **(R 336.1205(1)(a) & (b), R 336.1225)**
- 27. The permittee shall keep, in a satisfactory manner, monthly and total rolling 12-month records of SO₂ and NO_x emission calculations for C blast furnace casthouse baghouse, using emission factors developed during the testing, using the method shown in Appendix 1-7.2. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request². **(R 336.1205(1)(a) & (b), 40 CFR 52.21(c) and (d))**
- 28. The permittee shall record the pressure drop across the C Blast Furnace baghouse, daily. A pressure drop of between 2 and 14 inches w.c. shall be considered normal and can be changed upon request of permittee, with the approval of the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop is outside the normal range. **(R 336.1213(3))**

See Appendix 1-7.2

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- 4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
- 5. Any time an action taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBFROOFMONEAST	NA ¹	75.2 ¹	R 336.1225
2. SVBFROOFMONWEST	NA ¹	75.2 ¹	R 336.1225
3. SVCFCE	153 ¹	200 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. Records required under 40 CFR Part 63, Subpart FFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be keep offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUCBFBLEEDERS
EMISSION UNIT CONDITIONS**

DESCRIPTION C Blast Furnace bleeders

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20%	6 minute average	EUCBFBLEEDERS	Method 9, V.1	R 336.1301(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. To the extent that there are anticipated bleeder stack discharges during daylight hours and there is adequate notice of the discharge so that visible emissions observations can be made, Permittee shall conduct at least one visible emissions observation each calendar quarter. The observation shall begin at the start of the discharge, or as soon thereafter as is possible to make observations, and shall continue for one hour or until the discharge ceases, whichever occurs first. (R 336.1213(3)).

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. Permittee shall record each occurrence of dirty bleeder stack openings. The record shall include the following:
 - a. Date
 - b. Start time
 - c. Stop time(R 336.1213(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUTREADWELLDRYOUT
EMISSION UNIT CONDITIONS**

DESCRIPTION Treadwell car dry out operation

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20%	6 minute average	EUTREADWELLDRIYOUT	Method 9, VI.1	R 336.1301(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct visible emissions readings by a Method 9 certified observer of visible emissions from the Treadwell car dry out operations at least once a month during Treadwell car dry out operation. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. (R 336.1213(3))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EURELADLINGBOF
EMISSION UNIT CONDITIONS**

DESCRIPTION Reladling south & north – BOF

Flexible Group ID: FGBOFSHOP

POLLUTION CONTROL EQUIPMENT BOF secondary emissions baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20% ²	3-minute average	Fugitive emissions from the hot metal transfer operation building or enclosure	Method 9C, V.2	R 336.1365(2), 40 CFR 63.7790(a)(Table 1, Item 12)
2. PM	6.31 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.4, VI.5	40 CFR 52.21(b)(3)
3. PM-10	3.22 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.4, VI.5	R 336.1205(1)(a) & (b)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The Reladling South Operation and the associated baghouse shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 CFR Part 63, Subpart FFFFF. **(40 CFR 63.7800(a) and 40 CFR 63.6(e)(1)(i))**
2. The permittee shall develop and implement a written startup, shutdown and malfunction plan for the Reladling South Operation and the associated emission control system and operate in accordance with the plan during periods of startup, shutdown, and malfunction. **(40 CFR 63.7810(c), 40 CFR 63.7835(b), and 40 CFR 63.6(e)(3))**
3. The permittee shall not operate Reladling South Operation unless the emissions are directed to the BOF baghouse secondary dust collector and the BOF baghouse secondary dust collector is installed, maintained, and operated in a satisfactory manner². **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, 40 CFR 52.21(b)(3))**
4. Unless necessary for emergency, health or safety reasons, including to allow for safe shutdown of operations, the permittee shall not use the North Hole of the Basic Oxygen Furnace Shop for emergency hot metal transfer, hot metal desulfurization, or beaching of molten iron, without installation and operation of appropriate control technology which prevents emissions in excess of the applicable Michigan SIP Rule or additional requirements

that are promulgated under Section 112 of the Clean Air Act, 42 U.S.C. Section 7412, or are incorporated in a permit. If the North Hole is used for emergency reasons without the use of appropriate control technology to prevent emissions in excess of applicable emission limitations, the permittee shall report any such use in its next semiannual report. The report shall include the following information for each such prohibited use of the North Hole without the appropriate control technology:

- a. Date
- b. Start time
- c. Stop time
- d. Duration of use
- e. Reason for use **(R 336.1213(3))**

5. Upon routing the Reladling North Operations exhaust to the new BOF baghouse secondary dust collector, the permittee may utilize the Reladling North Operations in compliance with the applicable requirements of EURELADLINGBOF, and with the emission, monitoring, testing, and recordkeeping requirements of FGBOFSHOP. **(40 CFR 63 Subpart FFFFF)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVBOFBH is 150F¹. **(R 336.1225)**
2. The design air flow rate of the SVBOFBH is 1,000,000 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Sampling during the performance tests will occur only when the operations being controlled are in operation. **(40 CFR 63.7822(h))**
2. The permittee shall demonstrate compliance with the opacity limitation in I.1 of this section. with a certified observer of Method 9 visible emissions using Method 9 with the following exceptions: **(40 CFR 63.7823(d)(1)(i), R 336.1213(3))**
 - a. Record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles rather than using the procedure specified in Section 2.4 of Method 9. **(40 CFR 63.7823(d)(1)(ii))**
 - b. Determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals. **(40 CFR 63.7823(d)(1)(iii))**
3. Performance tests for visible emissions shall be conducted such that the opacity observations overlap with the performance tests for particulate. **(40 CFR 63.7823(b))**
4. Permittee shall conduct performance tests for particulate matter emissions and opacity at least once per permit term. **(40 CFR 63.7821)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv)). **(40 CFR 63.7842(a)(1))**
2. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
3. The permittee shall maintain records associated with performance tests and performance evaluations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**

4. Using the method shown in Appendix 1-7.4, the permittee shall calculate and record by the end of each calendar month the following from the BOF roof monitors:
 - a. Emissions of PM
 - b. Emissions of PM-10 **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3))**
5. The permittee shall keep a daily record of the amount of iron throughput to the Reladling South and North Operations². **(R 336.1205(1)(a) & (b), R 336.1225)**
6. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**

See Appendix 1-7.4

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
5. When actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with the requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOFBH	222 ¹	200 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the emission limitations and operation and maintenance requirements from 40 CFR Part 63, Subpart FFFFFF specified in Emission Unit Table EURELADLINGBOF, except during periods of startup, shutdown and malfunction. **(40 CFR 63.7810(a))**
2. Records required under 40 CFR Part 63, Subpart FFFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be keep offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUDESULFURIZATN
EMISSION UNIT CONDITIONS**

DESCRIPTION Desulfurization and slag skimming operation

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20% ²	3-minute average	Desulfurization baghouse stack	Method 9C, III.1, III.4	R 336.1366(1)
2. Opacity	20% ²	3-minute average	Fugitive emissions from desulfurization operations	Method 9C, III.1	R 336.1366(2)
3. Opacity	20%	3-minute average	BOF Shop Building	Method 9C, V.2	40 CFR 63.7790(a)(Table 1, Item 12)
4. PM	1. 0.01 gr/dscf ²	Test protocol	Desulfurization baghouse stack	V.4, VI.4, VI.9	40 CFR 52.21(b)(3), 40 CFR 63.7790(a)(Table 1, Item 10), R 336.1331(1)(c)
	2. 2.09 lb/hr ²	Test protocol	Desulfurization baghouse stack	General Condition 13 Approved Method, III.4	40 CFR 52.21(b)(3)
	3. 36.2 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.19, VI.20	40 CFR 52.21(b)(3)
5. PM-10	1. 0.0074 gr/dscf ²	Test protocol	Desulfurization baghouse stack	General Condition 13 Approved Method, III.4	R 336.1205(1)(a) & (b)
	2. 1.55 lb/hr ²	Test protocol	Desulfurization baghouse stack	General Condition 13 Approved Method, III.4	R 336.1205(1)(a) & (b)
	3. 6.88 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.18, VI.19	R 336.1205(1)(a) & (b)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
6. Manganese	0.00064 lb/hr ¹	Test protocol	Desulfurization baghouse stack	General Condition 13 Approved Method	R 336.1225
7. Pb	0.000278 lb/hr ²	Test protocol	Desulfurization baghouse stack	General Condition 13 Approved Method	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall operate and maintain the desulfurization control system in a manner as to control emissions from the desulfurization operation in compliance with the opacity limits². **(R 336.1910)**
- The Desulfurization Operation and the associated baghouse shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 CFR Part 63, Subpart FFFFF. **(40 CFR 63.7800(a) and 40 CFR 63.6(e)(1)(i))**
- The permittee shall develop and implement a written startup, shutdown and malfunction plan for the Desulfurization Operation and the associated emission control system and operate in accordance with the plan during periods of startup, shutdown, and malfunction. **(40 CFR 63.7810(c), 40 CFR 63.7835(b), and 40 CFR 63.6(e)(3))**
- The permittee shall not operate the Desulfurization Operation unless the baghouse dust collector is installed, maintained, and operated in a satisfactory manner². **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, 40 CFR 52.21(b)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The design temperature of the SVDESULF is 225F¹. **(R 336.1225)**
- The design air flow rate of the SVDESUL is 94,500 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- Sampling during the performance tests will occur only when the operations being controlled are in operation. **(40 CFR 63.7822(h))**
- The permittee shall demonstrate compliance with the opacity limitation in I.3 of this section with a certified observer of Method 9 visible emissions using Method 9 with the following exceptions: **(40 CFR 63.7823(d)(1)(i))**
 - Record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles rather than using the procedure specified in Section 2.4 of Method 9. **(40 CFR 63.7823(d)(1)(ii))**

- b. Determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals. **(40 CFR 63.7823(d)(1)(iii))**
3. Performance tests for visible emissions shall be conducted such that the opacity observations overlap with the performance tests for particulate. **(40 CFR 63.7823(b))**
4. Permittee shall conduct performance tests for particulate matter emissions and opacity at least once per permit term. **(40 CFR 63.7821)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv)). **(40 CFR 63.7842(a)(1))**
2. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
3. The permittee shall maintain records associated with performance tests and performance evaluations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**
4. Except as allowed in VI.7 of this section, permittee shall install, operate, and maintain a bag leak detection system meeting the following specifications on the baghouse control: **(40 CFR 63.7831(f))**
 - a. Certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic foot (0.0044 grains per actual cubic foot). **(40 CFR 63.7831(f)(1))**
 - b. Provides output of relative changes in particulate matter loadings. **(40 CFR 63.7831(f)(2))**
 - c. Is equipped with an alarm, located such that it is heard by appropriate plant personnel, that sounds an alarm when an increase in relative particulate loadings is detected over a preset level. **(40 CFR 63.7831(f)(3))**
 - d. Initially adjusted by establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device and setting the alarm set points and alarm delay time. **(40 CFR 63.7831(f)(5))**
5. Following the initial adjustment of the bag leak detection system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as specified in the operation and maintenance plan. This requirement does not apply if the permittee installs a COMS as specified in VI.7 of this section. **(40 CFR 63.7831(f)(6))**
6. If the sensitivity of the bag leak detection system is changed beyond the limits established pursuant to 40 CFR 63.7831(f)(6), a copy of a written certification by a responsible official shall be included in the semiannual compliance report for that period. This requirement does not apply if the permittee installs a COMS as specified in VI.7 of this section. **(40 CFR 63.7833(c)(2))**
7. If permittee does not install and operate a bag leak detection system, the permittee shall install, operate, and maintain a COMS according to the requirements in 40 CFR Sec. 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7832)**
8. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**
9. The permittee shall monitor the pressure drop across each baghouse compartment daily to ensure that the pressure drop is within the normal operating range identified in the manual. **(40 CFR 63.7830(b)(1))**

10. The permittee shall confirm that dust is being removed from hoppers on a weekly basis through visual observations or other means of determining the proper functioning of the removal mechanisms. **(40 CFR 63.7830(b)(2))**
11. The permittee shall perform monthly visual checks of bag tension on the shaker-type baghouse to ensure that bags are not kinked (knead or bent) or lying on their sides. If the shaker-type baghouse uses self-tensioning (spring-loaded) devices, the visual checks are not required. **(40 CFR 63.7830(b)(6))**
12. The permittee shall monitor the cleaning cycles of the baghouse to ensure proper operation using appropriate technology. **(40 CFR 63.7830(b)(4))**
13. The permittee shall check the bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means. **(40 CFR 63.7830(b)(5))**
14. The permittee shall inspect the baghouse to confirm the physical integrity of the baghouse through quarterly inspections of the interior of the baghouse for air leaks. **(40 CFR 63.7830(b)(7))**
15. The permittee shall inspect fans for wear, material buildup, and corrosion on a quarterly basis using visual inspections, vibration detectors, or equivalent means. **(40 CFR 63.7830(b)(8))**
16. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**
17. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 7832(b))**
18. The permittee shall obtain an analysis of the Desulfurization baghouse dust once per calendar quarter, or less frequently if approved in writing by the Air Quality Division. The analysis shall determine the percentage of Pb and Mn in the collected PM dust from the baghouse². **(R 336.1225, R 336.1228, 40 CFR 52.21(b)(3))**
19. Using the method shown in Appendix 1-7.5, the permittee shall calculate and record by the end of each calendar month the following from the BOF roof monitors:
 - a. Emissions of PM
 - b. Emissions of PM-10.²**(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3))**
20. The permittee shall keep a daily record of the amount of iron throughput to the Desulfurization Operations². **(R 336.1205(1)(a) & (b), R 336.1225)**

See Appendix 1-7.5

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
5. When actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with the requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVDESULF	66 ¹	37 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the emission limitations and operation and maintenance requirements from 40 CFR Part 63, Subpart FFFFF specified in this section, except during periods of startup, shutdown and malfunction. **(40 CFR 63.7810(a))**
2. Records required under 40 CFR Part 63, Subpart FFFFF specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be keep offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUDESULFWATERING
EMISSION UNIT CONDITIONS**

DESCRIPTION BOF desulfurization by-product material ("desulf") watering station located at the south end of the BOF building. Levy or any other winning bidder in the future for the service, digs the desulf materials with a front-end loader, brings them to an open area for cooling using water spray and for fugitive dust control. After thorough cooling, Levy or any other winning bidder in the future for the service, loads the materials into trucks for processing off site. Note: Levy currently has the contract to buy this material and, consequently, currently operates the Desulf Watering Station.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20%	3-minute average	Fugitive dust emissions from sources other than roads, lots, or storage pile	Method 9D, VI.1	Act 451 Section 324.5524(2)
2. Opacity	10% ²	3-minute average	Fugitive dust emissions from material handling activities at a storage pile and from building openings other than roof monitors. This shall not apply to storage pile material handling activities when wind speeds are in excess of 25 miles per hour	Method 9D, VI.1	Act 451 Section 324.5524(8), R 336.1301(c)
3. Opacity	20% ²	3-minute average	Fugitive dust emissions from roof monitors	Method 9C	R 336.1364

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. To control fugitive dust when processing the desulf material, the permittee shall not process the desulf material outside the BOF building without cooling off the material thoroughly with the water spray system². **(R 336.1910, R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall perform a Method 9D certified visible emission observation of the desulf watering station at least once every two weeks for a minimum of 15 minutes during the dumping, watering and loading operation. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3), R 336.1910)**
2. The permittee shall keep a desulfurization by-product material dump report on a 24-hour daily basis. The report shall have the following:
 - a. Date
 - b. Desulf Pot Number
 - c. Desulf Dump Time
 - d. Water time
 - e. Dig Time**(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUBOF
EMISSION UNIT CONDITIONS**

DESCRIPTION Basic oxygen furnace, two vessels

Flexible Group ID: FGBOFSHOP

POLLUTION CONTROL EQUIPMENT Electrostatic Precipitator for BOF Vessels, Baghouse for secondary emissions

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	1. 0.0152 gr/dscf ²	Test protocol	ESP Stack	V.9, III.1	40 CFR 52.21(b)(3)
	2. 0.02 gr/dscf	Test protocol	ESP Stack	V.6, V.7, III.4	40 CFR 63.7833(a)
	3. 50.94 lb/hr ²	Test protocol	ESP Stack	V.9, III.1	40 CFR 52.21(b)(3)
	4. 15.88 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.12	40 CFR 52.21(b)(3)
2. PM-10	1. 0.0113 gr/dscf ²	Test protocol	ESP Stack	V.9, III.1	40 CFR 52.21(b)(3)
	2. 37.70 lb/hr ²	Test protocol	ESP Stack	V.9	R 336.1205(1)(a) & (b)
	3. 7.25 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.12	R 336.1205(1)(a) & (b)
3. Opacity	20%	3-minute average	BOF Shop Building	V.1, V.2	40CFR 63.7790(a)
4. Opacity	20% ²	3-minute average	Roof Monitors	VI.1	R 336.1364(2)
5. Opacity	10% as a trigger for corrective action	Hourly average	ESP Stack	VI.5, VI.14, IX.3, III.4	40 CFR 63.7790(b)(3), 40 CFR, 63.7833(g)
6. NO _x	52.94 lb/hr ²	Test protocol	ESP Stack	V.9	R 336.1205(1)(a) & (b)
7. CO	3,057.4 lb/hr ²	Test protocol	ESP Stack	V.9	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate the Basic Oxygen Furnace unless the electrostatic precipitator (ESP) dust collector is installed and operating properly². **(R 336.1301, R 336.1331(1)(c), R 336.1910)**
2. The permittee shall not operate the Basic Oxygen Furnace unless the baghouse secondary emission dust collector is installed, maintained, and operated in a satisfactory manner². **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1910, 40 CFR 52.21(b)(3))**
3. The Basic Oxygen Furnace off-gas conditioning system which provides additional air-atomized water spray, shall be maintained as part of the off gas conditioning system². **(R 336.1910)**
4. The BOF vessels and ESP shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 CFR Part 63, Subpart FFFFF. **(40 CFR 63.7800(a) and 40 CFR 63.6(e)(1)(i))**
5. The permittee shall operate the BOF vessels and ESP according to an operation and maintenance plan that meets the requirements of 40 CFR 63.7800(b)(1)-(5). **(40 CFR 63.7800(b) and 40 CFR 63.6(e)(3))**
6. The permittee shall develop and implement a written startup, shutdown and malfunction (SSM) plan for the BOF vessels and the associated emission control system. The permittee shall also develop a malfunction abatement plan (MAP) pursuant to the requirements of Rule 911(2) for the operation of the ESP. The MAP may be a stand-alone plan or combined with the SSM. The MAP shall be submitted to the AQD District Supervisor for review and approval within 60 days of ROP issuance. **(R 336.1910, R 36.1911, 40 CFR 63.7810(c), 40 CFR 63.7835(b) and 40 CFR 63.6(e)(3))**
7. The permittee shall not produce more than 12,200 tons of steel per day based on a calendar week average nor 4,052,230 tons of steel per 12-month rolling time period from the BOF². **(R 336.1205(1)(a) & (b), R 336.1225, 40 CFR 52.21(b)(3))**
8. The permittee shall not charge more than 21,882 tons of fragmented scrap in the BOF per 12-month rolling time period¹. **(R 336.1201(3), R 336.1228, R 336.1901)**
9. During the oxygen blow, the permittee shall observe the vessel for slopping and shall manually reduce the oxygen flow rate if visible emissions from the slopping appear to have the ability to cause an exceedance of the opacity limit at the BOF Roof Monitor². **(R. 336.1301, R 336.1901).**
10. In the event steel with a carbon content of 1% or higher is produced that needs to be broken at the BOF, it shall be broken up with a breaking ball. **(MDEQ Consent Order 6-2006, Paragraph 11(D)(i))**
11. The ESP dust handling conveyor at the Basic Oxygen Furnace Building shall have a 180 degree cover over the belt. **(SIP No. 30-1993, Exhibit A, Paragraph 5 (F)(3))**
12. ESP dust shall be moved by covered belt conveyor to a storage bin and, if transported offsite, the ESP dust, including coarse dust collected in a drop chamber, shall be wetted and transported by a covered truck, or shall be transported by a pneumatic truck to a landfill or other approved facility for recycling and/or disposal. **(SIP No. 30-1993, Exhibit A, Paragraph 5 (B)(5))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall not operate the basic oxygen furnace (BOF) controlled by an electrostatic precipitator control system unless each transformer-rectifier set of the electrostatic precipitator is equipped with a saturable core reactor, silicon-controlled rectifier linear reactor, or equivalent type automatic control system approved by the AQD District Supervisor². **(R 336.1330(1))**
2. Each automatic controller shall be set to provide maximum power, or optimal power if operating in a sparking mode, from its respective transformer-rectifier set². **(R 336.1330(1))**
3. Each transformer-rectifier set shall be capable of operating in a spark-limited mode and shall meter and display the primary RMS voltage and amperage, the average secondary amperage, and the average spark rate². **(R 336.1330(2))**
4. The design temperature of the SVBOFESP is 300F¹. **(R 336.1225)**
5. The design air flow rate of the SVBOFESP is 841,500 acfm¹. **(R 336.1225)**
6. The design temperature of the SVBOFBH is 150F¹. **(R 336.1225)**
7. The design air flow rate of the SVBOFBH is 1,000,000 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall demonstrate compliance with the opacity limitation for the BOF Shop Building in I.3 of this section. with a certified observer of Method 9 visible emissions using Method 9 with the following exceptions:
(40 CFR 63.7823(d)(1)(i))
 - a. Record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles rather than using the procedure specified in Section 2.4 of Method 9. **(40 CFR 63.7823(d)(1)(ii))**
 - b. Determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals. **(40 CFR 63.7823(d)(1)(iii))**
2. Opacity observations from the roof monitors must cover at least three steel production cycles. A production cycle begins when scrap is charged and ends three minutes after slag is emptied from the vessel into the slag pot. **(40 CFR 63.7823(d)(4))**
3. Permittee shall determine and record the starting and stopping times of the steel production cycle. **(40 CFR 63.7823(d)(5))**
4. The permittee shall maintain a copy of the current operation and maintenance plans required in this section onsite and available for inspection. **(40 CFR 63.7834(b))**
5. The permittee shall maintain records of the monitoring data from the continuous opacity monitor. **(40 CFR 63.7842(d))**
6. Permittee shall conduct overlapping performance tests for particulate matter emissions from the BOF ESP and for opacity from the BOF roof monitor at least twice per permit term. **(40 CFR 63.7821(a), 40 CFR 63.7823(b))**
7. Permittee shall conduct performance tests for particulate matter emissions from the ESP stack at least twice per permit term. Testing shall be performed only during the steel production cycle and each sample will include an integral number of steel production cycles. **(40 CFR 63.7821), (40 CFR 63.7822(g)(1) and (2))**
8. Permittee shall conduct certified visible emissions observations of the BOF Roof Monitors using Method 9C for a minimum of two (2) hours per week. The observations must include two (2) complete heats. The emissions

observations must be recorded as they are made, with observations recorded at fifteen (15) second intervals. If any exceedance of visible emission standards is observed at the BOF roof monitors, the permittee shall conduct an investigation into the cause of the exceedance. The investigation shall consider data collected by the cameras that are required by Consent Order 6-2006, Paragraph 12(A). **(MDEQ Consent Order 6-2006, Paragraph 12(B)(i) & (ii))**

9. Permittee shall conduct performance tests for particulate matter, Nitrogen Oxide (NO_x), Carbon Monoxide (CO), and PM₁₀, as indicated in Section 1, at least once per permit term. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall perform a Method 9C certified visible emission observation for the BOF roof monitors (including reladling and desulfurization operations) at least once a week during BOF operations for a minimum of one hour which must include one complete heat. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. The written record shall include all of the information required for the BOF camera log in Section VI.28.c. The permittee shall review the written record on a monthly basis and verify all relevant information has been included. **(R 336.1364(2), R 336.1213(3))**
2. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv)). **(40 CFR 63.7842(a)(1))**
3. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
4. The permittee shall maintain records associated with performance tests, performance evaluations, and opacity observations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**
5. The permittee shall maintain records of the following for the continuous opacity monitor:
 - a. Periods when the monitor is malfunctioning or inoperative; **(40 CFR 63.7842(b)(1) and 40 CFR 63.10(b)(2)(vi))**
 - b. All required measurements necessary to demonstrate compliance with a standard (including, but not limited to, 15-minute averages of monitoring data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report); **(40 CFR 63.7842(b)(1) and 40 CFR 63.10(b)(2)(vii))**
 - c. All results of performance tests, monitor performance evaluations and opacity and visible emission observations; **(40 CFR 63.7842(b)(1) and 40 CFR 63.10(b)(2)(viii))**
 - d. All measurements necessary to determine the conditions of performance tests and evaluations; **(40 CFR 63.7842(b)(1), 40 CFR 63.10(b)(2)(ix))**
 - e. All monitor calibration checks; **(40 CFR 63.7842(b)(1) and 40 CFR 63.10(b)(2)(x))**
 - f. All adjustments and maintenance performed on the continuous monitor; **(40 CFR 63.7842(b)(1) and 40 CFR 63.10(b)(2)(xi))**
 - g. Monitoring data produced during performance testing; **(40 CFR 63.7842(b)(2))**
 - h. Superseded versions of the performance evaluation plan; and **(40 CFR 63.7842(b)(3) and 40 CFR 63.8(d)(3))**
 - i. The date and time each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, malfunction, or during another period. **(40 CFR 63.7842(b)(4))**
6. The permittee shall perform preventative maintenance on the ESP as specified in the operation and maintenance plan for the ESP. **(40 CFR 63.7834(a)(2))**
7. The permittee shall comply with the recordkeeping requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c) and (d). **(40 CFR 63.7842(a), (b), (c) and (d))**

8. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**
9. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 63.7832(b))**
10. The permittee shall keep 12-month rolling time period records of the amount of scrap and fragmented scrap charged to the BOF. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request¹. **(R 336.1201(3), R 336.1225, R 336.1228, R 336.1901)**
11. The permittee shall obtain an analysis of the BOF ESP dust once per calendar quarter, or less frequently if approved in writing by the Air Quality Division. The analysis shall determine the percentage of Pb, Hg, and Mn in the collected PM dust from the ESP². **(R 336.1225, R 336.1228, 40 CFR 52.21(d))**
12. Using the method shown in Appendix 1-7.6, the permittee shall calculate and record by the end of each calendar month the following from the BOF roof monitors:
 - a. emissions of PM
 - b. emissions of PM-10² **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3))**
13. The permittee shall keep a daily record of the amount of steel produced in the Basic Oxygen Furnace². **(R 336.1205(1)(a) & (b), R 336.1225)**
14. The permittee shall install, operate and maintain a continuous opacity monitor on the ESP stack and monitor the hourly average opacity of the stack continuously when the process is in operation. The COMS shall provide valid 1 hour averages for at least 95 percent of process operating hours for every quarterly reporting period. The permittee shall operate the COM system to meet the timelines, requirements and reporting detailed in Appendix 1-3.2². **(R 336.1301(1)(c), 40 CFR 63.7830(d), 40 CFR 63.7831(h), and 40 CFR 63.7832(a))**
15. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. All other data collected during all other periods must be used in assessing compliance. **(40 CFR 63.7832(b))**
16. The permittee shall record the oxygen flow rate at least once every minute during each oxygen blow. **(MDEQ Consent Order 6-2006, Paragraph 11(B)(iii))**
17. The effectiveness of the slopping procedure shall be monitored via the BOF Monitoring and Evaluation Requirements in paragraph 12 of MDEQ Consent Order 6-2006. **(MDEQ Consent Order 6-2006, Paragraph 11(B)(iv))**
18. The permittee shall maintain records of any new draft control equipment or instrument installation, and shall document that the draft set point programming is working properly after any such installation. **(MDEQ Consent Order 6-2006, Paragraph 11(C) (i) and (iii))**
19. The effectiveness of the draft set point program shall be monitored via the BOF Monitoring and Evaluation Requirements in Paragraph 12 of MDEQ Consent Order 6-2006. **(MDEQ Consent Order 6-2006, Paragraph 11(C)(iv))**
20. In the event steel with a carbon content of 1% or higher is produced that needs to be broken at the BOF, the permittee shall notify the AQD Southeast Michigan District office of such fact, and of its compliance with the breaking ball requirement set forth in III.12 of this section. **(MDEQ Consent Order 6-2006, Paragraph 11(D)(ii))**

21. The permittee shall inspect the exterior of the Guillotine Relief Dampers, Relief chambers and Downcomer on a weekly basis for evidence of exhaust leaks. Records of each inspection, to include the name of the inspector, the time and date of the inspection, shall be maintained for a period of five years. **(MDEQ Consent Order 6-2006, Paragraph 11(E)(i)), R 336.1301, R 336.1901)**
22. If the inspection identifies an exhaust leak likely to cause visible emissions, repair procedures shall be initiated. If the exhaust leak is identified during an operating period, temporary repairs shall be initiated within twenty-four (24) hours of verification of the leak. If the leak is identified during an outage, initiation of repairs shall be coordinated with any scheduled repairs. **(MDEQ Consent Order 6-2006, Paragraph 11(E)(ii)),**
23. Following completion of either temporary or permanent repairs, an inspection will be conducted during operation of the affected vessel. The performance of the repair shall be recorded. If additional repair is necessary, it will be scheduled and implemented in accordance with VI.22 of this section until the leak is no longer a source of emissions. **(MDEQ Consent Order 6-2006, Paragraph 11(E)(iii))**
24. Upon termination of MDEQ Consent Order 6-2006, if an inspection of the exterior of Guillotine Dampers, Relief Dampers, and Downcomer reveals an exhaust leak likely to lead to excess visible emissions, appropriate temporary or permanent repairs shall be initiated within twenty-four (24) hours of verification of the leak and shall be completed until leak is no longer a source of excess emission². **(R 336.1301, R 336.1901).**
25. The permittee shall install digital cameras at the BOF to better obtain continuous, real-time information about the status of its operations at the BOF and BOF emission points. **(MDEQ Consent Order 6-2006, Paragraph 12(A)(i))**
26. The images from the 8 cameras will be transmitted to the BOF pulpits for A and B vessels, to the ESP pulpit and to a conference room in the BOF. If excess emissions are observed from the BOF Roof Monitor, then,
 - a. The appropriate operator(s), if other than the viewer of the image, shall be immediately notified.
 - b. Any reasonable immediate corrective action that can be taken to address the emission shall be taken.
 - c. A log entry will be made of the observation, including the date and time of the observation, the source of the emissions and the cause, if known. If the cause is not known, an immediate investigation of the cause shall be undertaken, and the log updated with the results of such investigation.**(MDEQ Consent Order 6-2006, Paragraph 12(A)(iv))**
27. The images recorded by the cameras once every three seconds shall be stored so that the images can be retrieved for up to thirty (30) days. The images shall be stored such that images of a particular date and time can be identified and recalled. **(MDEQ Consent Order 6-2006, Paragraph 12(A)(v))**
28. After the termination of the provisions of MDEQ Consent Order 6-2006, Paragraph 12(A), permittee shall utilize 8 digital cameras, of which at least 4 must be in operation at any one time, and at least one of the four shall be an external view of the BOF, to obtain real-time information about the status of operations at the BOF and BOF emission points. Images from the cameras will be transmitted to the BOF pulpits for A and B vessels, or such other locations as may be approved by the AQD District Supervisor. If excess emissions are observed from the BOF Roof Monitor, then,
 - a. The appropriate operator(s), if other than the viewer of the image, shall be immediately notified.
 - b. Any reasonable immediate corrective action that can be taken to address the emission shall be taken.
 - c. A log entry will be made of the observation, including the date and time of the observation, the source of the emissions and the cause, if known. If the cause is unknown, an immediate investigation of the cause shall be undertaken, and the log updated with the results of such investigation.**(R 336.1301, R 336.1901, R 336.1213(3))**
29. The permittee shall perform a Method 9C certified visible emission observation of the BOF roof monitors during each beaching event that occurs during daylight hours unless impractical due to an emergency situation. Permittee shall maintain a log of each occurrence which shall include date, start time, stop time, visible emissions observations or the reason why such observation was not conducted, and reason for beaching iron. **(R 336.1364(2), R 336.1213(3))**

30. The permittee shall perform a Method 9 certified visible emission observation of the ESP stack at least once a week during operation for a minimum of one complete heat. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1301, R 336.1213(3))**

See Appendices 1-3.2 & 1-7.6

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
5. Any time an action taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**
6. The permittee shall prepare a report for each BOF roof monitor exceedance of the opacity limit in Section I.4 which it shall identify the date, time and extent of the exceedance, as well as a description of the investigation into the cause of the exceedance. The report shall identify the cause of the exceedance, to the extent ascertainable, and identify corrective action to prevent a recurrence of the exceedance. The reports generated pursuant to this requirement shall be sent to the AQD Southeast Michigan District Supervisor within fourteen (14) days of the occurrence. **(MDEQ Consent Order 6-2006, Paragraph 12(B)(iii))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOFESP	204 ¹	213 ¹	R 336.1225
2. SVBOFBH	222 ¹	200 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the emission limitations and operation and maintenance requirements from 40 CFR Part 63, Subpart FFFFF specified in this section, except during periods of startup, shutdown and malfunction. **(40 CFR 63.7810(a))**
2. Records required under 40 CFR Part 63, Subpart FFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be kept offsite. **(40 CFR 63.7843(b) and (c))**

3. If the hourly average opacity of the electrostatic precipitator exceeds the operating limit in I.5 of this section, the permittee shall implement the following procedures: **(40 CFR 63.7833(g))**
 - a. Permittee shall initiate corrective action to determine the cause of the exceedance within 1 hour. During any period of corrective action, the permittee shall continue to monitor and record all required operating parameters for equipment that remains in operation. Within 24 hours of the exceedance, the permittee shall measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit. **(40 CFR 63.7833(g)(1))**
 - b. If the initial corrective action required in paragraph (a) of this condition was not successful, the permittee shall complete additional corrective action within the next 24 hours (48 hours from the time of the exceedance). During any period of corrective action, the permittee shall continue to monitor and record all required operating parameters for equipment that remains in operation. After this second 24-hour period, the permittee shall again measure and record the hourly average operating parameter value for the emission unit on which corrective action was taken. If the hourly average parameter value meets the applicable operating limit, then the corrective action was successful and the emission unit is in compliance with the applicable operating limit. **(40 CFR 63.7833(g)(2))**
 - c. For purposes of paragraphs (a) and (b) of this condition, in the case of an exceedance of the hourly average opacity operating limit for the electrostatic precipitator, measurements of the hourly average opacity based on visible emission observations in accordance with Method 9 (40 CFR part 60, appendix A) may be taken to evaluate the effectiveness of corrective action. **(40 CFR 63.7833(g)(3))**
 - d. If the second attempt at corrective action required in paragraph (b) of this condition was not successful, the permittee shall report the exceedance as a deviation in the next semiannual compliance report according to 40 CFR 63.7841(b). **(40 CFR 63.7833(g)(4))**
4. The permittee shall implement the approved on-site screening procedure and material management plan, or alternate plan(s) as approved in writing by the AQD District Supervisor. The permittee shall require all suppliers to document that mercury-containing devices and switches have been removed from the scrap¹. **(R 336.1201(3), R 336.1228, R 336.1901)**
5. The permittee shall record the specific information as required in the on-site screening procedure and scrap management plan. All such records shall be kept on file for a period of at least five years and made available to the Air Quality Division upon request¹. **(R 336.1201(3), R 336.1228, R 336.1901)**
6. The permittee shall evaluate the effectiveness of the draft set point program each time any new draft control equipment or instruments are installed that could cause affect use of the appropriate draft point setting. **(MDEQ Consent Order 6-2006, Paragraph 11(C)(i))**
7. The permittee may petition in writing for a modification or termination of the draft set point program as described in IX.6 of this section. The petition shall be submitted to the AQD Southeast Michigan District Supervisor for approval. In any such petition, the permittee has the burden of proof. **(MDEQ Consent Order 6-2006, Paragraph 11(C)(ii))**
8. Upon approval of the AQD Southeast Michigan District Supervisor, the permittee may change the specified location of the cameras detailed in VI.26 of this section. Such approval shall be in writing and will be incorporated by reference as a revision to MDEQ Consent Order 6-2006. **(MDEQ Consent Order 6-2006, Paragraph 12(A)(vii))**
9. Following installation of the BOF secondary emission control equipment, the permittee may petition the AQD Southeast Michigan District Supervisor for elimination of any or all of the requirements for camera operation or visible emissions monitoring as described in VI.25, VI.26, and VI.27 of this section. **(MDEQ Consent Order 6-2006, Paragraph 12(B)(iv))**

10. The permittee shall not conduct any torch cutting of scrap at the EAF Stockhouse or any outside areas for use in the BOF, exclusive of demolition of existing facility structures, building and equipment, and emergencies unless it first obtains any necessary permit from the AQD to conduct such activity. **(MDEQ Consent Order 6-2006, Paragraph 11(A), (R 336.1301, R 336.1901)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EULADLEREFINE1
EMISSION UNIT CONDITIONS**

DESCRIPTION No. 1 Ladle refining facility

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	1. 0% ²	3-minute average	Ladle refining facility roof monitors	Method 9C, VI.17	R 336.1301(c)
	2. 20%	3-minute average	Ladle refining facility roof monitors	Method 9C, V.2 V.4	40 CFR 63.7790(a)
2. Opacity	5% ²	6-minute average	Ladle refining facility baghouse	Method 9, VI.17, VI.18	R 336.1301(c)
3. PM	1. 0.005 gr/dscf ²	Test Protocol	Ladle refining facility baghouse	V.5, VI.18	40 CFR 52.21(b)(3), R 336.1331(1)(c)
	2. 0.01 gr/dscf ²	Test protocol	Ladle refining facility baghouse	V.4, VI.4, VI.8	40 CFR 63.7790(a)
	3. 6.8 lb/hr ²	Test Protocol	Ladle refining facility baghouse	V.5	R 336.1331(1)(c) 40 CFR 52.21(b)(3)
4. PM-10	1. 0.005 gr/dscf ²	Test protocol	Ladle refining facility baghouse	V.5, VI.18	R 336.1205(1)(a) & (b)
	2. 6.8 lb/hr ²	Test protocol	Ladle refining facility baghouse	V.5, VI. 18	R 336.1205(1)(a) & (b)
5. Pb	0.0224 lb/hr ²	Test protocol	Ladle refining facility baghouse	V.5	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The Ladle Refining Facility No. 1 shall not be operated unless the main baghouse is installed and operating properly². (R 336.1331(1)(c), R 336.1910, R 336.1201(3))
- Ladle Refining Facility No. 1 and associated baghouse shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 CFR Part 63, Subpart FFFFF. (40 CFR 63.7800(a) and 40 CFR 63.6(e)(1)(i))

3. The permittee shall develop and implement a written startup, shutdown and malfunction plan for the Ladle Refining Facility No. 1 and the associated emission control system and operate in accordance with the plan during periods of startup, shutdown, and malfunction. **(40 CFR 63.7810(c), 40 CFR 63.7835(b), and 40 CFR 63.6(e)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVLADLEREFINE1 is 150F¹. **(R 336.1225)**
2. The design air flow rate of the SVLADLEREFINE1 is 175,000 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Sampling during the performance tests will occur only when the operations being controlled are in operation. **(40 CFR 63.7822(h))**
2. The permittee shall demonstrate compliance with the opacity limitation in I.1.2 of this section with a certified observer of Method 9 visible emissions using Method 9 with the following exceptions: **(40 CFR 63.7823(d)(1)(i))**
 - a. Record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles rather than using the procedure specified in Section 2.4 of Method 9. **(40 CFR 63.7823(d)(1)(ii))**
 - b. Determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals. **(40 CFR 63.7823(d)(1)(iii))**
3. Performance tests for visible emissions shall be conducted such that the opacity observations overlap with the performance tests for particulate. **(40 CFR 63.7823(b))**
4. Permittee shall conduct performance tests for particulate matter emissions and opacity at least once per permit term. **(40 CFR 63.7821)**
5. Permittee shall conduct performance tests for particulate matter emissions, PM10, and lead at least once per permit term as indicated in Section I, Emission Limits. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7842(a)(1))**
2. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
3. The permittee shall maintain records associated with performance tests, and performance evaluations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**
4. Except as allowed in VI.7 of this section, permittee shall install, operate, and maintain a bag leak detection system meeting the following specifications on the baghouse control: **(40 CFR 63.7831(f))**
 - a. Certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic foot (0.0044 grains per actual cubic foot). **(40 CFR 63.7831(f)(1))**
 - b. Provides output of relative changes in particulate matter loadings. **(40 CFR 63.7831(f)(2))**
 - c. Is equipped with an alarm, located such that it is heard by appropriate plant personnel, that sounds an alarm when an increase in relative particulate loadings is detected over a preset level. **(40 CFR 63.7831(f)(3))**

- d. Initially adjusted by establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device and setting the alarm set points and alarm delay time. **(40 CFR 63.7831(f)(5))**
5. Following the initial adjustment of the bag leak detection system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as specified in the operation and maintenance plan. This requirement does not apply if the permittee installs a COMS as specified in VI.7 of this section. **(40 CFR 63.7831(f)(6))**
6. If the sensitivity of the bag leak detection system is changed beyond the limits established pursuant to 40 CFR 63.7831(f)(6), a copy of a written certification by a responsible official shall be included in the semiannual compliance report for that period. This requirement does not apply if the permittee installs a COMS as specified in VI.7 of this section. **(40 CFR 63.7833(c)(2))**
7. If permittee does not install and operate a bag leak detection system, the permittee shall install, operate, and maintain a COMS according to the requirements in 40 CFR Sec. 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7832)**
8. The permittee shall monitor the pressure drop across each baghouse compartment daily to ensure that the pressure drop is within the normal operating range identified in the manual. **(40 CFR 63.7830(b)(1))**
9. The permittee shall confirm that dust is being removed from hoppers on a weekly basis through visual observations or other means of determining the proper functioning of the removal mechanisms. **(40 CFR 63.7830(b)(2))**
10. The permittee shall confirm that the compressed air supply to the pulse-jet baghouse is operating properly on a daily basis. **(40 CFR 63.7830(b)(3))**
11. The permittee shall monitor the cleaning cycles of the baghouse to ensure proper operation using appropriate technology. **(40 CFR 63.7830(b)(4))**
12. The permittee shall check the bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means. **(40 CFR 63.7830(b)(5))**
13. The permittee shall inspect the baghouse to confirm the physical integrity of the baghouse through quarterly inspections of the interior of the baghouse for air leaks. **(40 CFR 63.7830(b)(7))**
14. The permittee shall inspect fans for wear, material buildup, and corrosion on a quarterly basis using visual inspections, vibration detectors, or equivalent means. **(40 CFR 63.7830(b)(8))**
15. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**
16. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 63.7832(b))**
17. The permittee shall perform a Method 9 certified visible emission observation of the Ladle Refining Facility No. 1 baghouse stack for a minimum of twelve minutes and a non-certified visible emission observation of the Ladle Refining Facility No. 1 roof monitors at least once a month during processing activity. If visible emissions are observed during the non-certified observation, a Method 9 certified visible emission observation will be performed at that time. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**

18. The permittee shall record the pressure drop across the Ladle Refining Facility No.1 baghouse, weekly. A pressure drop of between 2 and 9 inches w.c. during processing shall be considered normal and can be changed upon request of permittee, with the approval of the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop is outside the normal range. **(R 336.1213(3))**
19. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
5. When actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with the requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLADLEREFINE1	108 ²	148 ²	R 336.1201(3)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the emission limitations and operation and maintenance requirements from 40 CFR Part 63, Subpart FFFFFF specified in Table EULADLEREFINE1, except during periods of startup, shutdown and malfunction. **(40 CFR 63.7810(a))**
2. Records required under 40 CFR Part 63, Subpart FFFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be kept offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EULADLEREFINE2
EMISSION UNIT CONDITIONS**

DESCRIPTION No. 2 Ladle refining facility

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	1. 0% ²	3-minute average	Ladle refining No. 2 building	Method 9C, VI.18	R 336.1301(c)
	2. 20%	3-minute average	Ladle refining No. 2 building	Method 9C, V.2, V.4	40 CFR 63.7790(a)
2. Opacity	5% ²	6-minute average	Baghouse stack	Method 9, VI.18, VI.19	R 336.1201(3)
3. PM	1. 0.005 gr/dscf ²	Test Protocol	Baghouse stack	V.5 VI.19	R 336.1331(1)(c), 40 CFR 52.21(b)(3)
	2. 0.01 gr/dscf	Test protocol	Baghouse stack	V.4, VI.4, VI.8	40 CFR 63.7790(a)
	3. 3.87 lb/hr ²	Test Protocol	Baghouse stack	V.5, VI.19	R 336.1331(1)(c) 40 CFR 52.21(b)(3)
4. PM-10	1. 0.005 gr/dscf ²	Testing protocol	Baghouse stack	V.5, VI.19	R 336.1205(1)(a) & (b)
	2. 3.87 lb/hr ²	Test protocol	Baghouse stack	V.5, VI.19	R 336.1205(1)(a) & (b)
5. Pb	0.0128 lb/hr ²	Test protocol	Baghouse stack	V.5	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate the Ladle Refining Facility No. 2 unless the 100,000 ACFM baghouse dust collector is installed and operating properly². (R 336.1331(1)(c), R 336.1910, R 336.1201(3))
- Ladle Refining Facility No. 2 and the associated baghouse shall be operated and maintained in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 CFR Part 63, Subpart FFFFF. (40 CFR 63.7800(a) and 40 CFR 63.6(e)(1)(i))
- The permittee shall develop and implement a written startup, shutdown and malfunction plan for the Ladle Refining Facility No. 2 and the associated emission control system and operate in accordance with the plan

during periods of startup, shutdown, and malfunction. **(40 CFR 63.7810(c), 40 CFR 63.7835(b), and 40 CFR 63.6(e)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The design temperature of the SVLADLEREFINE2 is 150F¹. **(R 336.1225)**
2. The design air flow rate of the SVLADLEREFINE2 is 100,000 acfm¹. **(R 336.1225)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Sampling during the performance tests will occur only when the operations being controlled are in operation. **(40 CFR 63.7822(h))**
2. The permittee shall demonstrate compliance with the opacity limitation in I.1.2 with a certified observer of Method 9 visible emissions using Method 9 with the following exceptions: **(40 CFR 63.7823(d)(1)(i))**
 - a. Record observations to the nearest 5 percent at 15-second intervals for at least three steel production cycles rather than using the procedure specified in Section 2.4 of Method 9. **(40 CFR 63.7823(d)(1)(ii))**
 - b. Determine the 3-minute block average opacity from the average of 12 consecutive observations recorded at 15-second intervals. **(40 CFR 63.7823(d)(1)(iii))**
3. Performance tests for visible emissions shall be conducted such that the opacity observations overlap with the performance tests for particulate. **(40 CFR 63.7823(b))**
4. Permittee shall conduct performance tests for particulate matter emissions and opacity at least once per permit term. **(40 CFR 63.7821)**
5. Permittee shall conduct performance tests for particulate matter emissions, PM10, and lead at least once per permit term as indicated in Section I. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv). **(40 CFR 63.7842(a)(1))**
2. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
3. The permittee shall maintain records associated with performance tests, and performance evaluations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**
4. Except as allowed in VI. 7, permittee shall install, operate, and maintain a bag leak detection system meeting the following specifications on the baghouse control: **(40 CFR 63.7831(f))**
 - a. Certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic foot (0.0044 grains per actual cubic foot). **(40 CFR 63.7831(f)(1))**
 - b. Provides output of relative changes in particulate matter loadings. **(40 CFR 63.7831(f)(2))**
 - c. Is equipped with an alarm, located such that it is heard by appropriate plant personnel, that sounds an alarm when an increase in relative particulate loadings is detected over a preset level. **(40 CFR 63.7831(f)(3))**
 - d. Initially adjusted by establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device and setting the alarm set points and alarm delay time. **(40 CFR 63.7831(f)(5))**
5. Following the initial adjustment of the bag leak detection system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as specified in the operation and

maintenance plan. This requirement does not apply if the permittee installs a COMS as specified in VI.7 of this section. **(40 CFR 63.7831(f)(6))**

6. If the sensitivity of the bag leak detection system is changed beyond the limits established pursuant to 40 CFR 63.7831(f)(6), a copy of a written certification by a responsible official shall be included in the semiannual compliance report for that period. This requirement does not apply if the permittee installs a COMS as specified in VI.7 of this section. **(40 CFR 63.7833(c)(2))**
7. If permittee does not install and operate a bag leak detection system, the permittee shall install, operate, and maintain a COMS according to the requirements in 40 CFR Sec. 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7832)**
8. The permittee shall monitor the pressure drop across each baghouse compartment daily to ensure that the pressure drop is within the normal operating range identified in the manual. **(40 CFR 63.7830(b)(1))**
9. The permittee shall confirm that dust is being removed from hoppers on a weekly basis through visual observations or other means of determining the proper functioning of the removal mechanisms. **(40 CFR 63.7830(b)(2))**
10. The permittee shall confirm that the compressed air supply to the pulse-jet baghouse is operating properly on a daily basis. **(40 CFR 63.7830(b)(3))**
11. The permittee shall monitor the cleaning cycles of the baghouse to ensure proper operation using appropriate technology. **(40 CFR 63.7830(b)(4))**
12. The permittee shall check the bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means. **(40 CFR 63.7830(b)(5))**
13. The permittee shall inspect the baghouse to confirm the physical integrity of the baghouse through quarterly inspections of the interior of the baghouse for air leaks. **(40 CFR 63.7830(b)(7))**
14. The permittee shall inspect fans for wear, material buildup, and corrosion on a quarterly basis using visual inspections, vibration detectors, or equivalent means. **(40 CFR 63.7830(b)(8))**
15. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**
16. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 63.7832(b))**
17. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**
18. The permittee shall perform a Method 9 certified visible emission observation of the Ladle Refining Facility No. 2 baghouse stack for a minimum of twelve minutes and a non-certified visible emission observation of the Ladle refining No.2 building at least once a month during processing activity. If visible emissions are observed during the non-certified observation, a Method 9 certified visible emission observation will be performed at that time. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
19. The permittee shall record the pressure drop across the Ladle Refining Facility No.2 baghouse, weekly. A pressure drop of between 2 and 9 inches w.c. during processing shall be considered normal and can be

changed upon request of permittee, with the approval of the AQD District Supervisor. The permittee shall initiate appropriate maintenance activity on the baghouse if the pressure drop is outside the normal range. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
5. When actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with the requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLADLEREFINE2	72 ¹	150 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the emission limitations and operation and maintenance requirements from 40 CFR Part 63, Subpart FFFFF specified in EULADLEREFINE2 , except during periods of startup, shutdown and malfunction. **(40 CFR 63.7810(a))**
2. Records required under 40 CFR Part 63, Subpart FFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be keep offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUVACUUMDEGASSER
EMISSION UNIT CONDITIONS**

DESCRIPTION Vacuum degasser

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Flare

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Carbon monoxide	1. 2.42 lb/hr ²	Based upon a flare destruction efficiency of 99.5%	Vacuum degasser	V.1	40 CFR 52.21(b)(3)
	2. 10.08 tons per year ²	Yearly	Vacuum degasser	VI.1	40 CFR 52.21(b)(3)
2. Visible emissions	No visible emissions ²	6 minute average	Vacuum degasser	VI.2	R 336.1201, 40 CFR 52.21(b)(3)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The vacuum degasser shall not be operated unless the flare is installed and operating properly. **(R 336.1213(3)(c)(ii))**
2. The vacuum degasser shall not be operated more than 8,350 hours per year. **(R 336.1213(4)(c))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a carbon monoxide emission test at least once during the five year life cycle of this permit. Performance of the stack test shall be according to the schedule stipulated in the Source Wide requirements – Section 1, Section V.1 of this section or more frequently upon the request of the AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to the AQD for approval. The final plan must be approved by the AQD prior to testing. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall record the following information:
 - a. Number of heats processed by the vacuum degasser, monthly. **(R 336.1201(3), R 336.1213(3))**
 - b. Total hours of operation for the vacuum degasser per month. **(R 336.1201(3), R 336.1213(3))**
 - c. Monitor the pilot light status daily. **(R 336.1213(3))**
2. The permittee shall perform a Method 9 certified visible emission observation of the vacuum degasser operation at least once every quarter during the processing activity. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUHANDSCARFING
EMISSION UNIT CONDITIONS**

DESCRIPTION Hand scarfing operation

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20% ²	6 minute average	Hand scarfing	Method 9, VI.1	R 336.1301, MDEQ Consent Order 6-2006(11)(f)(v)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Only one slab with manganese content in excess of 0.5% may be hand scarfed at any one time. (R 336.1213(3), Consent Order 6-2006(11)(F)(ii))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall perform a Method 9 visible emissions observation once per week to be done during daylight hours when hand scarfing of slabs containing manganese in excess of 0.5% is being conducted. The permittee shall maintain records of the Method 9 visible emissions observations. (MDEQ Consent Order 6-2006(11)(F)(iv), R 336.1213(3))
2. Permittee shall maintain a log sheet that identifies each slab hand scarfed, the manganese content of the slab and the start and stop times for hand scarfing of each slab with manganese content in excess of 0.5%. (R 336.1213(3), MDEQ Consent Order 6-2006(11)(F)(iii))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. Prior to hand scarfing any slab, the permittee shall determine the manganese content of the slab, based on available process data collected during the iron and steelmaking process. **(R 336.1213(3), Consent Order 6-2006(11)(F)(i))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUHCLSTORAGESCRU
EMISSION UNIT CONDITIONS**

DESCRIPTION Hydrochloric acid storage tanks and scrubber.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Scrubber

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall maintain and implement an Operation and Maintenance Plan (OMP), and a Startup, Shutdown, and Malfunction Plan (SSMP) for the HCl storage tanks scrubber. The OMP and SSMP can be put together in one single document. **(40 CFR Part 63, Subpart CCC, 63.1160(b)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep a record of the liquid flow to the scrubber daily. **(40 CFR 63.1162(a)(2), R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.
(R 336.1213(4)(c))

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall provide and operate, except during loading and unloading of acid, a closed-vent system for each hydrochloric acid storage vessel. **(40 CFR Part 63, Subpart CCC, 63.1159(b))**
2. Loading and unloading shall be conducted either through enclosed lines, or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system and ventilated through an air pollution control device. **(40 CFR Part 63, Subpart CCC, 63.1159(b))**
3. The permittee shall inspect each pickle line operation associated hydrochloric acid storage vessel semi-annually to determine that the closed-vent system, and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required. **(40 CFR Part 63, Subpart CCC, 63.1162(c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUPICKLINSRUBS
EMISSION UNIT CONDITIONS**

DESCRIPTION Three pickle lines (Numbers 1, 3, and 4) and three (3) associated scrubbers. (OLD PICKLE LINES)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Scrubbers

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Hydrochloric acid	18 ppmv	Test protocol	Pickle lines	V.1, III.2	40 CFR Part 63, Subpart CCC, 63.1157(a)(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The three scrubbers shall be installed and properly maintained at all times. **(R 336.1910)**
2. The permittee shall maintain and implement the site-specific operating parameter values for a minimum scrubber makeup water flow rate established from conducted performance test(s) as required by 40 CFR 63.1161(b). The permittee shall determine the average make up water flow rate during each performance test and shall maintain and implement that number as the minimum scrubber makeup water flow rate until the next performance test and a new number is established. **(40 CFR Part 63, Subpart CCC, 63.1161(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct hydrochloric acid emission test of the three pickle line scrubbers twice during the term of this permit in compliance with the required testing interval of every 2 ½ years or more frequently upon the request of the AQD. **(40 CFR Part 63, Subpart CCC, 63.1162(a)(1))**
3. During the duration of Consent Order AQD No. 9-2010, if any scrubber is not in operation at the time of the specified testing, it does not need to be tested. However, if any such scrubber is later placed back into operation, it must be tested within 180 days of resuming operation. **(Consent Order AQD No. 9-2010, Paragraph 10(h))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Operating parameters for the scrubbers established from the initial test conducted. **(40 CFR Part 63, Subpart CCC, 63.1162(a)(4))**
2. Occurrence and duration of each startup, shutdown, or malfunction of the pickling operation. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(1))**
3. Occurrence and duration of each startup, shutdown, or malfunction of the scrubbers **(40 CFR Part 63, Subpart CCC, 63.1165(a)(2))**
4. All maintenance performed on the scrubbers. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(3))**
5. Corrective actions taken during periods of startup, shutdown, and malfunction and dates of such actions if different from the procedures specified in the SSMP. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(4))**
6. All information necessary to demonstrate conformance with the SSMP when all actions taken during periods of startup, shutdown, and malfunction are consistent with the procedures specified in the plan. The information can be recorded on a checklist or similar form. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(5))**
7. All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements and measurements as may be necessary to determine the conditions of the initial test or subsequent tests. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(6))**
8. All results of initial or subsequent performance tests. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(7))**
9. All documentation supporting initial notifications and notifications of compliance status required by 40 CFR Part 63.9. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(10))**
10. The permittee shall keep and maintain the following records for 5 years from date of each record of:
 - a. Scrubber makeup water flow rate.
 - b. Calibration and manufacturer certification that monitoring devices are accurate to within 5%.
 - c. Each maintenance inspection and repair, replacement, or other corrective actions**(40 CFR Part 63, Subpart CCC, 63.1165(a)(11)(b)(i, ii, iii))**
11. Records of any applicability determination, including supporting analyses. **(40 CFR Part 63, Subpart CCC, 63.1165(a)(11))**
12. The water flow rate to the scrubbers must be monitored continuously and recorded at least once per shift. **(40 CFR Part 63, Subpart CCC, 63.1162(A)(2))**
13. The permittee shall inspect each scrubber associated with the pickling lines for operational worthiness at a minimum of once per month, if the scrubber is in operation. If any scrubber is not in operation it does not need to be inspected, and if any such scrubber is later placed back into operation, it must be inspected within 30 days of resuming operation. Each inspection shall include evaluation of the following:
 - a. Condition and leveling of the scrubber packing.
 - b. Condition, positioning and operation of the spray nozzles.
 - c. Condition and positioning of the mist eliminator.
 - d. Overall integrity of the scrubber and relevant ductwork.**(Consent Order AQD No. 9-2010, Paragraphs 11(a), (b) and (e))**
14. The permittee shall inspect each scrubber associated with the pickling lines for operational worthiness at a minimum of once per month. Each inspection shall identify whether any maintenance or repair is needed. **(Consent Order AQD No. 9-2010, Paragraph 11(c))**

15. If any inspection indicates the need for maintenance or repair the work will be effectuated as soon as practicable and in such event the Company shall comply with MAC 336.1910-1916, the requirements of 40 CFR 63.6(e)(3), and with its startup shutdown and malfunction plan for the pickle line scrubbers.
(Consent Order AQD No. 9-2010, Paragraph 11(d)), 40 CFR 63.6(e)(3)
16. Each inspection, and the results thereof, including any corrective action taken, will be recorded. Inspection records will be maintained. **(Consent Order AQD No. 9-2010, Paragraph 11(f))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.
(R 336.1213(4)(c))
4. If actions taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by a responsible official shall be submitted to AQD semiannually and delivered or postmarked by the 30th day following the end of each calendar half, July 30th and January 30th. **(40 CFR Part 63, Subpart CCC, 63.1164(c)(2))**
5. Any time an action taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii). **(40 CFR Part 63, Subpart CCC, 63.1164(c)(3))**
6. No less than 60 days prior to testing, a complete stack test protocol must be submitted to AQD for approval and the time schedule of the testing to allow the AQD to have an observer present during the test. The final plan must be approved by the AQD prior to testing. **(40 CFR Part 63, Subpart CCC, 63.1163(d))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall maintain and implement a written Operation and Maintenance Plan (OMP) and written Startup, Shutdown and Malfunction Plan (SSMP) for the pickle line scrubbers. The OMP for the pickle line scrubbers is incorporated by reference into this ROP permit. The OMP for the pickle line scrubbers must be consistent with good maintenance practices and must at a minimum:

- (i) Require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance.
 - (ii) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans.
 - (iii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling.
 - (iv) Require an inspection of each scrubber at intervals of no less than 3 months with:
 - (A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices.
 - (B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components.
 - (C) Repair or replacement of droplet eliminator elements as needed.
 - (D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber.
 - (E) Adjustment of damper settings for consistency with the required air flow.
 - (v) Require an alternate means of scrubber inspection, if the scrubber is not equipped with a viewport or access hatch allowing visual inspection.
 - (vi) Require the initiation of the applicable corrective action procedures specified in the OMP within one (1) working day of the detection of an operating problem and the completion of all corrective actions as soon as practicable.
 - (vii) Require the maintenance of records containing the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, the date of the repair, replacement, or other corrective action, and the signature of the responsible maintenance official. **(40 CFR Part 63, Subpart CCC, 63.1160(b)(2), (40 CFR Part 63, Subpart CCC, 63.1164(c)(1), (40 CFR Part 63, Subpart A, 63.6(e)(3), (R 336.1213(3))**
2. The permittee shall install, operate, and maintain systems for the measurement and recording of the scrubber makeup water flow rate. **(40 CFR Part 63, Subpart CCC, 63.1162(a)(2))**
3. Each water flow monitoring device shall be certified by the manufacturer to be accurate to within 5% and shall be calibrated in accordance with the manufacturer's instructions at least once per year. **(40 CFR Part 63, Subpart CCC, 63.1162(a)(5))**
4. Permittee may develop and implement alternative monitoring requirements subject to approval by the AQD District Supervisor. **(40 CFR Part 63, Subpart CCC, 63.1162(a)(6))**
5. The permittee shall operate and maintain at all times each emission source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the level required by the standard at all times, including during period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan. **(40 CFR Part 63, Subpart CCC, 63.1164(c), 40 CFR Part 63, Subpart A, 63.6(e)(1)(i))**
6. Any successful corrective action taken on the scrubbers in order to achieve compliance during testing shall be made part of the Company's Operation and maintenance Plan (O&M Plan). Corrective parameters that are made part of the O&M Plan shall be monitored and recorded on a daily basis. **(MDEQ Consent Order AQD No. 9-2010, Paragraph 10(g))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUANNEALFURNACES
EMISSION UNIT CONDITIONS**

DESCRIPTION 52 annealing furnaces (composed of 34 hydrogen nitrogen annealing furnaces, and 18 hydrogen annealing furnaces).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	140 lb/MMscf natural gas fired ²	Test protocol	Anneal Furnaces	V.1	R 336.1205(1)(a) & (b)
2 PM	10 lb/MMscf natural gas fired ²	Test protocol	Anneal Furnaces	V.1	40 CFR 52.21(b)(3)
3. PM-10	10 lb/MMscf natural gas fired ²	Test protocol	Anneal Furnaces	V.1	R 336.1205(1)(a) & (b)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Oil shall not be used as fuel in the annealing furnaces². (R 336.1205(1)(a) & (b))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct a NO_x, PM, and PM10 emission test of a representative furnace at least once during the five year life cycle of this permit. Performance of the stack test shall be according to the schedule stipulated in the Source-Wide requirements, Section V.1 of this section or more frequently upon the request of the AQD. No less than 30 days prior to testing, a complete stack test protocol must be submitted to the AQD for approval. The final plan must be approved by the AQD prior to testing. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall keep a record of the total natural gas consumption per month for the annealing furnaces.
(R 336.1205(1)(a) & (b))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.
(R 336.1213(4)(c))

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D-1. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGB&CSTOVES	B Blast Furnace & C Blast Furnace stoves.	EUBFCESTOVE, EUCFCESTOVE
FGB&CCASTHOUSES	B Blast Furnace & C Blast Furnace cast house operations.	EUBBFCASTHOUSE, EUCBFCASTHOUSE
FGBOFSHOP	Two Basic Oxygen Furnace vessels and BOF Reladling south and north.	EUBOF, EULADLEREFINE1, EULADLEREFINE2,
FGSREHEATFURN123	Slab reheat furnaces 1, 2, 3 at hot strip building.	EUSREHEATFURNACE1, EUSREHEATFURNACE2, EUSREHEATFURNACE3
FGCOLDCLEANERS	Cold cleaners with applicable requirements.	EUCOLDCLEANERS
FGRULE290	Emission units that are exempt pursuant to R 336.1290.	EUBOFLIMERECEIVI, EUCCOKEUNLOADEE, EUMAINTPAINTSP

FGB&CSTOVES

FLEXIBLE GROUP CONDITIONS

DESCRIPTION B Blast Furnace & C Blast Furnace stoves

Emission Units: EUBFCESTOVE, EUCFCESTOVE

POLLUTION CONTROL EQUIPMENT Low-NOx technology, mechanical collectors and scrubbers for blast furnace gas precleaning

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	439.18 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	FGB&CSTOVES	VI.1, VI.2	R 336.1205(1)(a) & (b)
2. SO ₂	1096.1 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	FGB&CSTOVES	VI.3	40 CFR 52.21(j)
3. CO	8,760 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	FGB&CSTOVES	VI.1, VI.2	40 CFR 52.21(c) & (d)
4. PM	14.16 lb/hr ²	Test protocol	FGB&CSTOVES	General Condition 13, VI.1, VI.2	40 CFR 52.21(b)(3)
5. PM-10	14.16 lb/hr ²	Test protocol	FGB&CSTOVES	General Condition 13, VI.1, VI.2	R 336.1205(1)(a) & (b)
6. Mn	0.0154 lb/hr ¹	Test protocol	FGB&CSTOVES	General Condition 13, VI.1, VI.2	R 336.1225
7. Total Hg	0.000414 lb/hr ¹	Test protocol	FGB&CSTOVES	General Condition 13, VI.1, VI.2	R 336.1203(3), R 336.1228, R 336.1901
8. Pb	0.0141 lb/hr ²	Test protocol	FGB&CSTOVES	General Condition 13, VI.1, VI.2	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep, in a satisfactory manner, daily fuel usage records for FGB&CSTOVES. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request². **(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3), (c), & (d))**
2. Compliance with emission limits in I.1, I.3, I.4, I.5, I.6, I.7, and I.8 of this section shall be determined by establishing emission factors based up on the most recent BFCE and CFCE stove stack testing and applying these emission factors to the daily fuel usage recorded in VI.1 of this section, as outlined in Appendix 1-7.8². **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1228, R 336.1901, 40 CFR 52.21(b)(3), (c), & (d))**
3. Utilizing the CEMS for SO₂ emissions from the C Blast Furnace stoves, the permittee shall determine compliance with the emission limits in I.2 by determining daily emission factors and applying these emission factors to the daily fuel usage recorded in VI.1, as outlined in Appendix 1-7.9². **(40 CFR 52.21 (c), & (d))**

See Appendices 1-7.8 and 1-7.9

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGB&CCASTHOUSES

FLEXIBLE GROUP CONDITIONS

DESCRIPTION B Blast Furnace & C Blast Furnace cast house operations

Emission Units: EUBBFCASTHOUSE, EUCBFCASTHOUSE

POLLUTION CONTROL EQUIPMENT Baghouse control of fugitive emissions (one for each operating casthouse)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	19.93 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.1, VI.2	40 CFR 52.21(b)(3)
2. PM-10	10.16 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.1, VI.2	R 336.1205(1)(a) & (b)
3. SO ₂	1. 29.94 lb/hr ²	Test protocol	Baghouse stacks	General Condition 13, VI.2, VI.3	40 CFR 52.21(c) & (d), 40 CFR 52.21(j)
	2. 91.79 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Baghouse stacks	VI.2, VI.3	40 CFR 52.21(c) & (d), 40 CFR 52.21(j)
4. NO _x	1. 3.19 lb/hr ²	Test protocol	Baghouse stacks	General Condition 13, VI.2, VI. 3	R 336.1205(1)(a) & (b)
	2. 9.77 tons per year ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Baghouse stacks	VI.2, VI.3,	R 336.1205(1)(a) & (b)
5. VOC	8.81 lb/hr ²	Test protocol	Baghouse stacks	General Condition 13, VI.2, VI.3	R 336.1702(a)
6. Mn	1. 0.00385 lb/hr ¹	Test protocol	Baghouse stacks	General Condition 13, VI.2, VI.3	R 336.1225
	2. 0.0060 lb/hr ¹	Based on a daily time period	Roof monitors	VI.1, VI.2	R 336.1225
7. Pb	1. 0.000223 lb/hr ²	Test protocol	Baghouse stacks	General Condition 13, VI.2, VI.3	40 CFR 52.21(d)
	2. 0.000087 lb/hr ²	Based on a 12-month rolling time period as determined at the end of each calendar month	Roof monitors	VI.1, VI.2	40 CFR 52.21(d)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The iron production from FGB&CBFCASTHOUSES shall not exceed a combined maximum of 10,000 ton/day based on a calendar week average². **(R 336.1205(1)(a) & (b), R 336.1225, 40 CFR 52.21(b)(3))**
2. The iron production from FGB&CBFCASTHOUSES shall not exceed a combined maximum of 3,321,500 tons per 12-month rolling period². **(R 336.1205(1)(a) & (b), R 336.1225, 40 CFR 52.21(b)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Using the method shown in Appendix 1-7.7, the permittee shall calculate and record by the end of each calendar month the following from the casthouse roof monitors:
 - a. Emissions of PM
 - b. Emissions of PM-10
 - c. Emissions of Mn
 - d. Emissions of Pb²**(R 336.1205(1)(a) & (b), R 336.1225, 40 CFR 52.21(b)(3), 40 CFR 52.21(d))**
2. The permittee shall keep a daily record of the amount of iron cast from each furnace individually and combined². **(R 336.1205(1)(a) & (b), R 336.1225)**
3. Using the method shown in Appendix 1-7.7, the permittee shall keep records of SO₂, NO_x, VOC, Mn, and Pb emission calculations for FGB&CBFCASTHOUSES (baghouses) using emission factors from stack testing, and other factors, as specified in Appendix 1-7.7. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(c) and (d))**
4. The permittee shall demonstrate continuous compliance for each affected source subject to an emission limit or opacity limit in 63.7790(a) as specified in 40 CFR Part 63 Subpart FFFFF 63.7833(a). **(40 CFR Part 63 Subpart FFFFF 63.7833(a))**
5. The permittee shall demonstrate continuous compliance with the operation and maintenance requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7834(a) and (b). **(40 CFR Part 63 Subpart FFFFF 63.7834(a) and (b))**
6. The permittee shall comply with the recordkeeping requirements as specified in 40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c), and (d). **(40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c), and (d))**

See Appendix 1-7.7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall comply with the notification requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7840(a), (d), and (e). **(40 CFR Part 63 Subpart FFFFF 63.7840(a), (d), and (e))**
5. The permittee shall comply with the notification requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7841(a), (b), (c) and (d). **(40 CFR Part 63 Subpart FFFFF 63.7841(a), (b), (c) and (d))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBBFROOFMONEAST	NA ¹	75.2 ¹	R 336.1225
2. SVBBFROOFMONWEST	NA ¹	75.2 ¹	R 336.1225
3. SVBFCE (Baghouse)	111 ¹	200 ¹	R 336.1225
4. SVCBFROOFMONEAST	NA ¹	75.2 ¹	R 336.1225
5. SVCBFROOFMONWEST	NA ¹	75.2 ¹	R 336.1225
6. SVCFCE (Baghouse)	153 ¹	200 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. All conveyors in the Blast Furnace Raw Material Handling System shall have a 180 degree cover except for the "B" and "C" Blast Furnace charging conveyors which shall be totally enclosed². **(R 336.1901, R 336.1301)**
2. All Blast Furnace Raw Material Handling Conveyor transfer points shall be covered². **(R 336.1901, R 336.1301)**
3. Permittee shall utilize written operating procedures designed to minimize emissions from treadwell car operations, including filling the cars with molten iron to 90% capacity when possible, minimizing the impact of Treadwell cars when they are coupled, and accelerating the cars at a slow and steady rate, to the extent possible². **(R 336.1901, R 336.1301)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGBOFSHOP

FLEXIBLE GROUP CONDITIONS

DESCRIPTION Two Basic Oxygen Furnace vessels and BOF Reladling south and north

Emission Units: EUBOF, EURELADLINGBOF

POLLUTION CONTROL EQUIPMENT ESP, secondary emissions baghouse

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	1. 0.003 gr/dscf ²	Test Protocol	Baghouse stack	V.7, VI.25, III.1	R 336.1331(1)(c) 40 CFR 52.21(b)(3)
	2. 0.01 gr/dscf	Test protocol	Baghouse stack	V.6, VI. 6, VI. 10	40 CFR 63.7790(a)
	3. 7.45 lb/hr ²	Test protocol	Baghouse stack	V.7, III.1	40 CFR 52.21(b)(3)
2. PM-10	1. 0.00135 gr/dscf ²	Test protocol	Baghouse stack	V.7, III.1	R 336.1205(1)(a) & (b)
	2. 3.35 lb/hr ²	Test protocol	Baghouse stack	V.7, III.1	R 336.1205(1)(a) & (b)
3. NO _x	10.17 lb/hr ²	Test protocol	Baghouse stack	V.7	R 336.1205(1)(a) & (b)
4. Manganese	1. 0.101 lb/hr ¹	Test protocol	Baghouse & ESP stacks combined	V.7	R 336.1225
	2. 0.0709 lb/hr ¹	Test protocol	Baghouse stack	V.7	R 336.1225
5. Total mercury	0.0125 lb/hr ¹	Test protocol	Baghouse & ESP stacks combined	V.7	R 336.1201(3), R 336.1228, R 336.1901
6. Lead	0.067 lb/hr ²	Test protocol	Baghouse & ESP stacks combined	V.7	40 CFR 52.21(d)
7. Opacity	20% ²	3-minute average	Baghouse stack	VI.25	R 336.1364(1), R 336.1365(1)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the Basic Oxygen Furnace or the Reladling South Operation unless the baghouse secondary emission dust collector is installed, maintained, and operated in a satisfactory manner².
(R 336.1205(1)(a) & (b), R 336.1225, R 336.1331(c), R 336.1910, 40 CFR 52.21(b)(3))
2. The permittee shall keep on file a copy of the BOF secondary baghouse capture system design plans and a signed certification from the designer, certifying that the baghouse capture system is designed to achieve no

less than 98% collection efficiency for both the BOF secondary emissions and the reladling south emissions. These design plans shall include a range of BOF vessel angles to achieve optimum emission capture².
(R 336.1205(1)(a) & (b), 40 CFR 52.21(b)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Performance tests shall occur when the operations are at maximum routine operating conditions. **(R 336.2003, 40 CFR 63.7822(g) & (h))**
2. Permittee shall determine and record the starting and stopping times of the steel production cycle. **(40 CFR 63.7823(d)(5))**
3. The permittee shall maintain a copy of the current operation and maintenance plans required in this section onsite and available for inspection. **(40 CFR 63.7834(b))**
4. The permittee shall maintain records of the time corrective action was initiated, the corrective action taken, and the date when corrective actions were completed in response to a bag leak detection system alarm, if applicable. **(40 CFR 63.7842(d) and 40 CFR 63.7833(c)(1))**
5. The permittee may change the operating limits for the baghouse capture system if the following requirements are met: **(40 CFR 63.7824(c))**
 - a. Submit a written notification to the Administrator requesting to conduct a new performance test to revise the operating limit. **(40 CFR 63.7824(c)(1))**
 - b. Conduct a performance test to demonstrate compliance with the applicable operating limitation. **(40 CFR 63.7824(c)(2))**
 - c. Establish revised operating limits according to the applicable procedures in 40 CFR 63.7824, paragraphs (a) through (c) for a capture system. **(40 CFR 63.7824(c)(3))**
6. Permittee shall conduct overlapping performance tests for particulate matter emissions from the BOF secondary baghouse and opacity from the BOF roof monitor at least once per permit term. **(40 CFR 63.7821)**
7. Permittee shall conduct performance tests for particulate matter, PM10, NOx, Manganese, Total Mercury and Lead from the BOF Baghouse Stack or BOF Baghouse stack and ESP stack combined at least once per permit term as indicated in Section I. **(R 336.1213)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If applicable, the permittee shall install, maintain, and operate a Continuous Parametric Monitoring System (CPMS) for the baghouse capture system according to the requirements of 40 CFR 63.7830(a) and 40 CFR 63.7831(e). **(40 CFR 63.7830(a))**
2. The permittee shall maintain a copy of each notification and report submitted under 40 CFR Part 63, Subpart FFFFF, including all documentation supporting the initial notification or notification of compliance status submitted according to 40 CFR 63.10(b)(2)(xiv)). **(40 CFR 63.7842(a)(1))**
3. The permittee shall maintain the records required for startup, shutdown and malfunction under 63.6(e)(3)(iii) through (v). **(40 CFR 63.7842(a)(2))**
4. The permittee shall maintain records associated with performance tests, performance evaluations, and opacity observations as required by 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.7842(a)(3))**

5. The permittee shall comply with the recordkeeping requirement as specified in 40 CFR Part 63 Subpart FFFFF 63.7842(a), (b), (c) and (d). **(40 CFR 63.7842(a), (b), (c) and (d))**
6. Except as allowed in VI.9 of this section, permittee shall install, operate, and maintain a bag leak detection system meeting the following specifications on the baghouse control, if applicable: **(40 CFR 63.7831(f))**
 - a. Certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic foot (0.0044 grains per actual cubic foot). **(40 CFR 63.7831(f)(1))**
 - b. Provides output of relative changes in particulate matter loadings. **(40 CFR 63.7831(f)(2))**
 - c. Is equipped with an alarm, located such that it is heard by appropriate plant personnel, that sounds an alarm when an increase in relative particulate loadings is detected over a preset level. **(40 CFR 63.7831(f)(3))**
 - d. Initially adjusted by establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device and setting the alarm set points and alarm delay time. **(40 CFR 63.7831(f)(5))**
7. Following the initial adjustment of the bag leak detection system, the permittee shall not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time except as specified in the operation and maintenance plan, if applicable. This requirement does not apply if the permittee installs a COMS as specified in VI.9. **(40 CFR 63.7831(f)(6))**
8. If the sensitivity of the bag leak detection system is changed beyond the limits established pursuant to 40 CFR 63.7831(f)(6), a copy of a written certification by a responsible official shall be included in the semiannual compliance report for that period, if applicable. This requirement does not apply if the permittee installs a COMS as specified in VI.9. **(40 CFR 63.7833(c)(2))**
9. If permittee does not install and operate a bag leak detection system, the permittee shall install, operate, and maintain a COMS according to the requirements in 40CFR Sec. 63.7831(h) and monitor the hourly average opacity of emissions exiting each control device stack according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7832)**
10. The permittee shall monitor the pressure drop across each baghouse compartment daily to ensure that the pressure drop is within the normal operating range identified in the manual, if applicable. **(40 CFR 63.7830(b)(1))**
11. The permittee shall confirm that dust is being removed from hoppers on a weekly basis through visual observations or other means of determining the proper functioning of the removal mechanisms, if applicable. **(40 CFR 63.7830(b)(2))**
12. The permittee shall confirm that the compressed air supply to the pulse-jet baghouse is operating properly on a daily basis, if applicable. **(40 CFR 63.7830(b)(3))**
13. The permittee shall monitor the cleaning cycles of the baghouse to ensure proper operation using appropriate technology, if applicable. **(40 CFR 63.7830(b)(4))**
14. The permittee shall check the bag cleaning mechanisms for proper functioning through monthly visual inspections or equivalent means, if applicable. **(40 CFR 63.7830(b)(5))**
15. The permittee shall inspect the baghouse to confirm the physical integrity of the baghouse through quarterly inspections of the interior of the baghouse for air leaks, if applicable. **(40 CFR 63.7830(b)(7))**
16. The permittee shall inspect fans for wear, material buildup, and corrosion on a quarterly basis using visual inspections, vibration detectors, or equivalent means, if applicable. **(40 CFR 63.7830(b)(8))**
17. The permittee shall monitor the process as required by this section, except during monitoring malfunctions, out-of-control periods, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments). **(40 CFR 63.7832(a))**

18. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used in data averages and calculations used to report emission or operating levels or to fulfill minimum data availability requirements. **(40 CFR 63.7832(b))**
19. The permittee shall obtain an analysis of the BOF baghouse dust once per calendar quarter, or less frequently if approved in writing by the Air Quality Division. The analysis shall determine the percentage of Pb, Hg, and Mn in the collected PM dust from the baghouse. **(R 336.1225, R 336.1228, 40 CFR 52.21(d))**
20. The permittee shall prepare, and operate at all times according to, a written operation and maintenance plan for the baghouse capture system. The plan shall address each of the following: **(40 CFR 63.7800(b))**
 - a. Weekly inspections of the equipment that is important to the performance of the total capture system, including, but not limited to, observations of the physical appearance of the equipment and requirements to repair any defect or deficiency in the capture system before the next scheduled inspection; **(R 336.1301, R 336.1364(1), 40 CFR 63.7800(b)(1))**
 - b. Operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system including, but not limited to, operating limit parameters that indicate the level of the ventilation draft and the damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to, volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. **(40 CFR 63.7800(b)(3))**
21. If applicable, the permittee shall monitor the hourly average actual volumetric flow rate through each separately ducted hood for each steel production cycle and the average total volumetric flow rate at the inlet to the baghouse for each steel production cycle according to the requirements in 40 CFR 63.7832. **(40 CFR 63.7830(a))**
22. If applicable, the permittee shall develop and make available for inspection upon request by AQD a site-specific monitoring plan that addresses all of the following requirements for the baghouse capture system: **(40 CFR 63.7831(a))**
 - a. Installation of the CPMS sampling probe or other interface at a measurement location relative to each hooded emission point such that the measurement is representative of capture of the exhaust emissions; **(40 CFR 63.7831(a)(1))**
 - b. Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system; **(40 CFR 63.7831(a)(2))**
 - c. Performance evaluation procedures and acceptance criteria; **(40 CFR 63.7831(a)(3))**
 - d. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), (c)(4)(ii), (c)(7), and (c)(8); **(40 CFR 63.7831(a)(4))**
 - e. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and **(40 CFR 63.7831(a)(5))**
 - f. Ongoing recordkeeping and reporting procedures in accordance the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). **(40 CFR 63.7831(a)(6))**
23. If applicable, the permittee shall operate and maintain the capture system CPMS in continuous operation according to the site-specific monitoring plan. Unless otherwise specified, the CPMS shall: **(40 CFR 63.7831(b))**
 - a. Complete a minimum of one cycle of operation for each successive 15-minute period and collect a minimum of three of the required four data points to constitute a valid hour of data; **(40 CFR 63.7831(b)(1))**
 - b. Provide valid hourly data for at least 95 percent of every averaging period; and **(40 CFR 63.7831(b)(2))**
 - c. Determine and record the hourly average of all recorded readings. **(40 CFR 63.7831(b)(3))**
24. The permittee shall operate the baghouse capture system at or above the lowest value or settings established for the operating limits in the operation and maintenance plan and collect, reduce, and record the monitoring data for each of the operating limit parameters. **(40 CFR 63.7833(b))**
25. The permittee shall perform a Method 9C visible emission observation for the BOF baghouse stack at least once a month during BOF processing activity. The permittee shall initiate corrective action upon observation of

visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Permittee shall submit a notification of intent to perform any performance testing under 40 CFR Part 63, Subpart FFFFF at least 60 calendar days before testing is to begin. **(40 CFR 63.7840(d))**
5. Any time an action taken by the permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of 63.10(d)(5)(ii). **(40 CFR Part 63.7841(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOFESP	204 ¹	213 ¹	R 336.1225
2. SVBOFBH	222 ¹	200 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. Records required under 40 CFR Part 63, Subpart FFFFF and specified in this section shall be retained for five years. The records must be maintained onsite for the two most recent years of the five year period. Records from the remaining three years of the five year period may be keep offsite. **(40 CFR 63.7843(b) and (c))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGSREHEATFURN123

FLEXIBLE GROUP CONDITIONS

DESCRIPTION Slab reheat furnaces 1, 2, 3 at hot strip building

Emission Units: EUSREHEATFURNACE1, EUSREHEATFURNACE2, EUSREHEATFURNACE3

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20% ²	6 minute average	FGSREHEATFURNACE 123	Method 9, VI.2	R 336.1301
2. NO _x	0.11 lb/MMBtu ²	Test protocol	FGSREHEATFURNACE 123	V.1, VI.1	R 336.1205(1)(a) & (b), R 336.1801(4)
3. PM	10 lb/MMscf natural gas fired ²	Test Protocol	FGSREHEATFURNACE 123	V.1, VI.1	40 CFR 52.21(b)(3), R 336.1331(1)(c)
4. PM-10	10 lb/MMscf natural gas fired ²	Test protocol	FGSREHEATFURNACE 123	V.1, VI.1	R 336.1205(1)(a) & (b)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- Oil shall not be used as fuel in slab reheat furnaces Nos. 1, 2, and 3². (R 336.1201(3))
- The permittee shall use and implement the procedures outlined in the Furnace Light Up (ignition) and Furnace Warm Up procedures for the reheat furnaces to ensure proper air and fuel mixing. (R 336.1213(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee shall conduct a performance test of a representative slab reheat furnace to demonstrate compliance with the applicable emission limit as specified in Section I of FGSREHEATFURN123 no less frequently than once per term of this ROP. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep a record of the total natural gas consumption per month². **(R 336.1205(1)(a) & (b))**
2. The permittee shall perform a Method 9 certified visible emission observation of the slab reheat furnace 1, 2 & 3 respective stacks at least once a month during processing activity. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Within 60 days after the end of each ozone control period, permittee shall submit a summary report to the Air Quality Division. The summary report shall contain the following information:
 - a. The date, time, magnitude of emissions, and emission rates where applicable, of the specified emission unit or utility system.
 - b. If emissions or emission rates exceed the emissions or rates allowed for in the ozone control period by the applicable emission limit, the cause, if known, and any corrective action taken.
 - c. The total operating time of the emission unit during the ozone control period.
 - d. For continuous emission monitoring systems, system performance information shall include the date and time of each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments. When the continuous monitoring system has not been inoperative, repaired, or adjusted, the information shall be stated in the report.²**(R 336.1801(12))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCOLDCLEANERS

FLEXIBLE GROUP CONDITIONS

DESCRIPTION Any cold cleaner placed into operation after 7/1/79 that is exempt from NSR permitting by R 336.1281(h) or R 336.1285(r)(iv)

Emission Units: EUCOLDCLEANERS

POLLUTION CONTROL EQUIPMENT NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not use cleaning solvents containing more than 5 percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(3))**
2. The permittee may install or construct an unlimited number of new cold cleaners that meet one of the following requirements:
 - a. The air/ vapor interface of the cold cleaner is no more than 10 square feet. **(R 336.1281(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(r)(iv))**
3. Parts shall be drained not less than 15 seconds or until dripping ceases. **(R 336.1707(3)(b))**
4. Waste solvent shall be stored only in closed containers, unless demonstrated to be a safety hazard and disposed of in a manner such that not more than 20% by weight is allowed to evaporate into the atmosphere. **(R 336.1707(3)(c))**
5. The permittee shall perform routine maintenance on the cold cleaning machine as recommended by the manufacturer. **(R 336.1213(3))**
6. Each cold cleaner shall not be operated using a solvent having a Reid vapor pressure of more than 0.6 psia or heated above 120 degrees Fahrenheit, unless at least one of the following is met: **(R 336.1707(2))**
 - a. The cold cleaner is designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
 - b. The solvent bath is covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**

- c. The cold cleaner is controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. A cover shall be installed and the cover shall be closed whenever parts are not being handled in the cleaner. **(R 336.1707(3)(a))**
2. The cover shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia, the solvent is agitated or the solvent is heated. **(R 336.1707(3)(a))**
3. A device shall be available for draining cleaned parts. **(R 336.1707(3)(b))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The identification name/number, air/vapor interface area and type of solvent used (including Reid vapor pressure and VOC content) shall be maintained for each cold cleaner. **(R 336.1213(3))**
2. As noted in Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20%, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3))**
3. If the solvent is heated the solvent temperature shall be monitored and recorded on a monthly basis, during peak operating conditions. **(R 336.1213(3))**
4. As noted in R 336.1707(2), if applicable, the option chosen to comply with R 336.1707(2) shall be recorded. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall maintain written procedures to demonstrate compliance with the requirements of R 336.1707. Such procedures shall be posted in an accessible, conspicuous location near each machine. **(R 336.1707(4))**
2. The permittee may construct, reconstruct, modify, install or commence operation of any new or existing emission units under FGCOLD CLEANERS without modifying the RO permit provided it is not defined as a minor or significant modification to the RO permit, as defined by R 336.1216(2) and R 336.1216(3), respectively, and the following provisions are met:
 - a. It is not a major stationary source or major modification as defined in the prevention of significant deterioration regulations in 40 CFR 52.21. **(R 336.1278(a))**
 - b. It is not a major offset source or major offset modification as defined in R 336.1113(c) and (b), respectively, for which volatile organic compounds, particulate matter, PM-10, carbon monoxide, nitrogen oxides, sulfur dioxide or lead is a non-attainment air contaminant. **(R 336.1278(b))**
 - c. It does not have actual emissions of volatile organic compounds, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide or lead above the significance levels as defined in R 336.1119. **(R 336.1278(c))**
 - d. It is not a major source as defined in the national emission standards for hazardous air pollutants for source categories, 40 CFR 63.2, and it is not subject to the provisions of 40 CFR 63.40 through 63.44. **(R 336.1278(d))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGRULE290

FLEXIBLE GROUP CONDITIONS

DESCRIPTION Any existing or future emission unit that emits air contaminants which are exempt from the requirements of R 336.1201 pursuant to R 336.1290

Emission Units: EUBOFLIMERECEIVI, EUCKOKEUNLOADEE, EUMAINTPAINTSP

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**
2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(a)(ii))**
 - a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
 - b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(B))**
 - c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(C))**
 - d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(a)(ii)(D))**
3. Each emission unit that emits noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), above, and all of the following provisions are met: **(R 336.1290(a)(iii))**
 - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(a)(iii)(A))**
 - b. The visible emissions from the emission unit are not more than 5 percent opacity in accordance with the methods contained in Rule 303. **(R 336.1290(a)(iii)(B))**
 - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ Rule 290 Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. **(R 336.1213(3))**
 - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
 - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
 - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
 - d. Records identifying the ITSL and IRS�, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). **(R 336.1213(3))**
 - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this section and Rule 290. **(R 336.1213(3), R 336.1290(c))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
 - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(b), R 336.1213(3))**
 - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 1-4.2

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of compliance pursuant to General Condition 23 of Part A. Due March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Due annually by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 1-8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee may construct, reconstruct, modify, install or commence operation of any new or existing emission units under FGRULE290 without modifying the RO Permit providing that it is not defined as a minor or significant modification to the ROP, as defined by R 336.1216(2) and R 336.1216(3), respectively, and the following provisions are met:
 - a. It is not a major stationary source or major modification as defined in the Prevention of Significant Deterioration Regulations in 40 CFR 52.21. **(R 336.1278(a))**
 - b. It is not a major offset source or a major offset modification as defined in R 336.113© and (b), respectively, for which volatile organic compounds, particulate matter, PM-10, carbon monoxide, nitrogen oxides, sulfur dioxide, or lead is a non-attainment air contaminant. **(R 336.1278(b))**
 - c. It does not have actual emissions of volatile organic compounds, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, or lead above the significance level as defined in R 336.1119. **(R 336.1278(c))**
 - d. It is not a major source as defined in the National Emission Standards for Hazardous Air Pollutants for source categories, 40 CFR 63.2, and it is not subject to the provisions of 40 CFR 63.40 through 63.44. **(R 336.1278(d))**

E-1. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

Section 112r of the Clean Air Act regarding Risk Management Plans. The facility is not currently subject to these requirements.

APPENDICES

Appendix 1-1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

Appendix 1-2. Schedule of Compliance

The permittee certified in this ROP application that this stationary source is in compliance with all applicable requirements of this ROP except for the following: EUCFCESTOVE, I.7; EUCBFCASTHOUSE I.2, I.6, I.9 and I.10; EUDESULFURIZATN I.6, I.7;; EUBOF I.7 and FGBOFSHOP I.2.1 and I.2.2. The permittee is also allegedly in non compliance with A-1. General Condition.12 (a) & (b). As a result, the permittee was required to submit a Schedule of Compliance as defined in Rule 119(a), pursuant to Rule 210(2) and Rule 213(4).

A Schedule of Compliance for any applicable requirements that the permittee is not in compliance with at the time of the ROP issuance is supplemental to, and shall not sanction non-compliance with, the underlying applicable requirements on which it is based.

The permittee shall adhere to this schedule of compliance and submit the required certified progress reports accordingly.

Compliance Plan

The permittee outlined the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

As reflected in the Schedule of Compliance below, the permittee shall obtain a permit to update PTI 182-05B to address any tested exceedances of the emission limits contained in PTI 182-05B. Also, the permittee shall implement corrective measures to reduce the sourcewide potential for particulate fallout and incorporate those measures into an enforceable Consent Order and the Renewable Operating Permit. Corrective measures include implementation of the fallout mitigation plan submitted by Severstal on December 4, 2010 and approved by MDEQ on March 24, 2011.

Schedule of Compliance

The following schedule of compliance conforms to the provisions of Rule 119(a) and Rule 213(4).

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requireme nt	Remedial Measure	Required Action	Milestone Date	Progress Reports
EUCFCESTOVE	I.7	Obtain a modified PTI to address exceedances of emission limits in PTI 182-05B	Issuance of modified PTI	Effective date of modified PTI	Quarterly – due by the 15 th of the month following the end of the quarter
		Incorporate modified PTI conditions into the ROP	Submit application to modify the ROP in accordance with the requirements of R 336.1216.	Within 60 calendar days of the effective date of the PTI	N/A
EUCBFCASTHOUSE	I.2, 6, 9 and 10	Same as EUCFCE STOVE	Same as EUCFCE STOVE	Same as above	N/A
EUDESULFURIZATN	I.6 and 7	Same as EUCFCE STOVE	Same as EUCFCE STOVE	Same as above	N/A
EUBOF	I.7	Same as EUCFCE STOVE	Same as EUCFCE STOVE	Same as above	N/A

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
FGBOFSHOP	I.2.1 and I.2.2	Same as EUCFCE STOVE	Same as EUCFCE STOVE	Same as above	N/A
SOURCEWIDE CONDITIONS	A-1. General Condition.1 2(a) & (b)	Implement corrective measures to address potential sources of particulate fallout and include measures in an AQD consent order and incorporate into the ROP	Implement December 4, 2010 fallout mitigation plan as agreed upon between Permittee and AQD per MDEQ letter on March 24, 2011	Within 8 months of ROP or Consent Order issuance whichever occurs first or alternate timeline approved by AQD District Supervisor	Quarterly - The 15 th of the month following the end of the quarter
			Provide additional information requested by the AQD within the timeframe specified by AQD staff	As requested	N/A
			Incorporate acceptable corrective measures into an enforceable Consent Order	Effective date of AQD Consent Order	Quarterly - The 15 th of the month following the end of the quarter
			Submit application to modify the ROP in accordance with the requirements of R 336.1216	Within 60 calendar days of the effective date of the Consent Order	

Progress Reports

The permittee shall submit Certified Progress Reports to the appropriate AQD District Supervisor using the MDEQ Report Certification form (EQP 5736). Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor. **(R 336.1213(4)(b))**

Progress reports shall contain the following information:

The projected dates for achieving scheduled activities, milestones or compliance as required in the schedule of compliance. **(R 336.1213(4)(b)(i))**

The actual dates that the activities, milestones, or compliance are achieved. **(R 336.1213(4)(b)(i))**

An explanation of why any dates in the schedule of compliance were not or will not be met. **(R 336.1213(4)(b)(ii))**

A description of any preventative or corrective measures adopted in order to ensure that the schedule of compliance is met. **(R 336.1213(4)(b)(iii))**

Appendix 1-3. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in EUCFCESTOVE for SO₂ CEMS (see 3.1) and EUBOF for COMS (see 1-3.2).

1-3.1 SO₂ Monitoring Continuous Emission Monitoring System (CEMS) Requirements

1. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
2. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2 of Appendix B, 40 CFR Part 60.
3. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F)
4. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
 - a) A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - b) A report of all periods of CEMS downtime and corrective action.
 - c) A report of the total operating time of the EUCFCESTOVE during the reporting period.
 - d) A report of any periods that the CEMS exceeds the instrument range.
 - e) If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

1-3.2 Continuous Opacity Monitoring System (COMS) Requirements

1. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
2. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.
3. The permittee shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to AQD. Within 30 days after the completion of the audit, the results of the annual audit shall be submitted to the AQD.
4. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to Air Quality Division, within 30 days following

the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

- a) A report of each exceedance above the hourly average limits as specified in the MACT regulations, Section 63.7833(e) and (g). This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - b) A report of all periods of COMS downtime and corrective action.
 - c) A report of the total operating time of the EUBOF during the reporting period.
 - d) If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.
5. Severstal shall do the following: for each day that the ESP opacity monitor indicates a one hour average opacity above 10%, Severstal shall keep records of the total power input (voltage and secondary current) of the ESP fields and verify that the water flow to the evaporation chamber is within standard operating levels. For each day that the ESP opacity monitor indicates a one hour average opacity above 10%: if the total power input of the ESP fields exceeds 90% of the established baseline value, and water flow to the evaporation chamber is within standard operational levels, no further investigation of the cause of the exceedance is required. If the total power input of the ESP fields is less than 90% of the established baseline, or if the total power input of the ESP fields exceeds 90% of the established baseline value and water flow to the evaporation chamber is below standard operational levels, Severstal will initiate an investigation as to the cause of the exceedance. This investigation may include such factors as the reason for the lower total power input, the potential for condensation in the exhaust stack causing a false opacity exceedance (by checking parameters which may include the temperature of the exhaust gas at the COMS, the rate of water to the evaporation chamber, outside ambient temperature, operating stage of EUBOF) and performing method 9 opacity observations of the ESP stack. The ESP total power input baseline and standard operational evaporation chamber water input shall be established within 90 days of permit issuance. Upon approval by the MDEQ District Office, Severstal may change the parameter used to establish a baseline value, establish a new baseline value, and/or use a different trigger percentage of the baseline value to initiate the corrective actions described in this paragraph.

All monitoring data is shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix 1-4. Recordkeeping

The permittee shall use the following approved format and procedures for the recordkeeping requirements referenced in VI.1 of the Source-Wide Conditions. Alternative formats must be approved by the AQD District Supervisor.

1-4.1 Required Records for Fugitive Dust Sources

- A. Unpaved Roads / Lots
 1. Date of Treatment
 2. Control Measure Used
 3. Responsible Person's Initials
 4. Name of Product Applied
 5. Amount of Solution / Water Applied
 6. Dilution Ratio
 7. Road Segment / Lot Identification
- B. Paved Roads / Lots
 1. Date of Treatment
 2. Control Measure Used
 3. Responsible Person's Initials
 4. Road Segment / Lot Identification

C. Storage Piles / Material Handling

1. Date of Treatment
2. Control Measure Used
3. Responsible Person's Initials
4. Dilution Ratio
5. Amount of Dust Suppressant / Water Applied
6. Identification of Pile / Material Handling Operation Treated
7. Equipment Used

1-4.2 RULE290 Recordkeeping

The permittee shall use the DEQ Rule 290 Permit to Install Exemption Record form (EQP 3558) or an alternative format as approved by the AQD District Supervisor to document monthly records as required by R 336.1290 and Table F-01.04 FGRULE290.

Appendix 1-5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 1-6. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. 199700004. This includes any PTI that were incorporated into the Source-wide PTI through amendments or modifications and any PTI that remained off-permit until this ROP renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
182-05B	Modifications to the iron & steel plant	EU COAL HANDLING, EUBFCSTOVE, EUBBFCASTHOUSE, EUCFCESTOVE, EUCBFCASTHOUSE, EURELADLINGBOF, EUBOF, EUDESULF, EUDESULFWATERING, EULADLEREFINE1, EULADLEREFINE2, EUANNEALFURNACES, FGB&CBFCASTHOUSES, FGB&CSTOVES, FGBOFSHOP, FGSREHEATFURNACE123, FGFACILITY
8-08	New pickle line tandem cold mill and hot dip galvanizing line	The equipment not yet installed at the time of this ROP application.

Appendix 1-7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in the emission units and flexible group identified below.

Any changes proposed to this Appendix shall be submitted to the AQD Southeast Michigan District Office and approved, in writing, before the change is implemented.

1-7.1 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in the requirements for EUBFCESTOVE:

NO_x Monthly Stove emissions = $BFG_{BM} \times \text{NO}_x \text{ Test Factor (pound NO}_x \text{ per MMcf of BFG)} / 2,000 \text{ lb/ton}$

NO_x Annual Stove emissions = $BFG_{BA} \times \text{NO}_x \text{ Test Factor (pound NO}_x \text{ per MMcf of BFG)} / 2,000 \text{ lb/ton}$

CO Hourly Stove emissions = $BFG_{BD} \times \text{CO Test Factor (pound CO per MMcf of BFG)} / 24 \text{ hours}$

Where:

NO_x Test Factor is an emission factor based upon site specific stack test data for B-FCE and the CO Test Factor is an emission factor based upon available site specific stack test data for C-FCE. Permit data will also be evaluated in determining the appropriateness of these factors.

BFG_{BD} = actual total Blast Furnace Gas combustion rate on a daily basis, based on a calendar week average, in MMcf BFG for B-FCE.

BFG_{BM} = actual total Blast Furnace Gas combustion rate for the previous month in MMcf BFG for B-FCE.

BFG_{BA} = actual total Blast Furnace Gas combustion rate for the previous 12-month rolling time period in MMcf BFG for B-FCE.

1-7.2 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in EUCBFCASTHOUSE:

SO₂ Monthly emissions from baghouse = $CR_{CM} \times \text{SO}_2 \text{ Test Factor (pound SO}_2 \text{ per ton of iron)} / 2,000 \text{ lb/ton}$

SO₂ Annual emissions from baghouse = $CR_{CA} \times \text{SO}_2 \text{ Test Factor (pound SO}_2 \text{ per ton of iron)} / 2,000 \text{ lb/ton}$

NO_x Monthly emissions from baghouse = $CR_{CM} \times \text{NO}_x \text{ Test Factor (pound NO}_x \text{ per ton of iron)} / 2,000 \text{ lb/ton}$

NO_x Annual emissions from baghouse = $CR_{CA} \times \text{NO}_x \text{ Test Factor (pound NO}_x \text{ per ton of iron)} / 2,000 \text{ lb/ton}$

Where:

SO₂ and NO_x Test Factors are emission factors based upon site specific stack test data for C-FCE Casthouse Baghouse. Permit data will also be evaluated in determining the appropriateness of these factors.

CR_{CM} = actual casting rate for the previous month in tons of iron for C-FCE.

CR_{CA} = actual casting rate for the previous 12-month rolling time period in tons of iron for C-FCE.

1-7.3 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in EUCFCESTOVE:

NO_x Monthly Stove emissions = $BFG_{CM} \times \text{NO}_x \text{ Test Factor (pound NO}_x \text{ per MMcf of BFG)} / 2,000 \text{ lb/ton}$

NO_x Annual Stove emissions = $BFG_{CA} \times \text{NO}_x \text{ Test Factor (pound NO}_x \text{ per MMcf of BFG)} / 2,000 \text{ lb/ton}$

CO Monthly Stove emissions = $BFG_{CM} \times \text{CO Test Factor (pound CO per MMcf of BFG)} / 2,000 \text{ lb/ton}$

CO Annual Stove emissions = $BFG_{CA} \times \text{CO Test Factor (pound CO per MMcf of BFG)} / 2,000 \text{ lb/ton}$

Where:

NO_x and CO Test Factors are emission factors based upon site specific stack test data for C-FCE. Permit data will also be evaluated in determining the appropriateness of these factors.

BFG_{CM} = actual total Blast Furnace Gas combustion rate for the previous month in MMcf BFG for C-FCE.

BFG_{CA} = actual total Blast Furnace Gas combustion rate for the previous 12-month rolling time period in MMcf BFG for C-FCE.

1-7.4 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in EURELADLINGBOF:

PM roof monitor Annual emissions = $RLD \times 0.0038$ pound PM per ton of iron / 2,000 lb/ton

PM-10 roof monitor Annual emissions = $RLD \times 0.0019$ pound PM-10 per ton of iron / 2,000 lb/ton

Where:

RLD = actual throughput for the previous 12-month rolling time period in tons of iron for reladling operations.

1-7.5 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in EUDESULF:

PM roof monitor Annual emissions = $DSF \times 0.0218$ pound PM per ton of iron / 2,000 lb/ton

PM-10 roof monitor Annual emissions = $DSF \times 0.0041$ pound PM-10 per ton of iron / 2,000 lb/ton

Where:

DSF = actual throughput for the previous 12-month rolling time period in tons of iron for desulfurization operations.

1-7.6 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in EUBOF:

PM roof monitor Annual emissions = $BOF_C \times 0.006$ pound PM per ton metal charged + $BOF_S \times 0.0026$ pound PM per ton slag tapped + $BOF_T \times 0.0026$ pound PM per ton steel tapped / 2,000 lb/ton

PM-10 roof monitor Annual emissions = $BOF_C \times 0.00276$ pound PM-10 per ton metal charged + $BOF_S \times 0.0012$ pound PM-10 per ton slag tapped + $BOF_T \times 0.0012$ pound PM-10 per ton steel tapped / 2,000 lb/ton

Where:

BOF_C = actual charging rate for the previous 12-month rolling time period in tons of metal for the BOF.

BOF_S = actual tapping rate for the previous 12-month rolling time period in tons of slag for the BOF.

BOF_T = actual tapping rate for the previous 12-month rolling time period in tons of steel for the BOF.

1-7.7 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in FGB&CCASTHOUSES:

PM Roof Monitor emissions = $CR_{TA} \times 0.012$ pound PM per ton of iron / 2,000 lb/ton

PM-10 Roof Monitor emissions = $CR_{TA} \times 0.0061$ pound PM-10 per ton of iron / 2,000 lb/ton

Manganese Roof Monitor emissions = $CR_{TD} \times 0.000011$ pound manganese per ton of iron / 24 hours

Lead Roof Monitor emissions = $CR_{TA} \times 0.00000016$ pound lead per ton of iron / 8760 hours per 12-month rolling time period

SO₂ Hourly baghouse emissions = $CR_{TD} \times SO_2$ Test Factor (in pound SO₂ per ton of iron) / 24 hours

SO₂ Monthly baghouse emissions = $CR_{TM} \times SO_2$ Test Factor (pound SO₂ per ton of iron) / 2,000 lb/ton

SO₂ Annual baghouse emissions = $CR_{TA} \times SO_2$ Test Factor (pound SO₂ per ton of iron) / 2,000 lb/ton

NOx Hourly baghouse emissions = $CR_{TD} \times NOx$ Test Factor (in pound NOx per ton of iron) / 24 hours

NOx Monthly baghouse emissions = $CR_{TM} \times NOx$ Test Factor (pound NOx per ton of iron) / 2,000 lb/ton

NOx Annual baghouse emissions = $CR_{TA} \times NOx$ Test Factor (pound NOx per ton of iron) / 2,000 lb/ton

VOC Hourly baghouse emissions = $CR_{TD} \times VOC$ Test Factor (in pound VOC per ton of iron) / 24 hours

Manganese baghouse emissions = $CR_{TD} \times Mn$ Test Factor (in pound manganese per ton of iron) / 24 hours

Lead baghouse emissions = $CR_{TA} \times Pb$ Test Factor (in pound lead per ton of iron) / 8760 hours per 12-month rolling time period

Where:

SO₂, NOx, VOC, Mn and Pb Test Factors are the casthouse baghouse emission factors based upon available site specific stack test data for the C-FCE Casthouse Baghouse. Permit data will also be evaluated in determining the appropriateness of these factors.

CR_{TD} = actual total casting rate on a daily basis, based on a calendar week average, in tons of iron for B-FCE and C-FCE combined.

CR_{TM} = actual total casting rate for the previous month in tons of iron for B-FCE and C-FCE combined.

CR_{TA} = actual total casting rate for the previous 12-month rolling time period in tons of iron for B-FCE and C-FCE combined.

1-7.8 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in FGB&CSTOVES (except SO₂):

NOx Annual Stove emissions = $[(BFG_{BA} \times B\text{-FCE } NOx \text{ Test Factor (lb NOx per MMcf of BFG))} + (BFG_{CA} \times C\text{-FCE } NOx \text{ Test Factor (lb NOx per MMcf of BFG)))] / 2,000 \text{ lb/ton}$

CO Annual Stove emissions = $BFG_{TA} \times CO \text{ Test Factor (pound CO per MMcf of BFG) / 2,000 lb/ton}$

PM Hourly Stove emissions = $BFG_{TD} \times PM \text{ Test Factor (in pound PM per MMcf of BFG) / 24 hours}$

PM-10 Hourly Stove emissions = $BFG_{TD} \times PM10 \text{ Test Factor (in pound PM10 per MMcf of BFG) / 24 hours}$

Manganese Hourly Stove emissions = $BFG_{TD} \times Mn \text{ Test Factor (in pound Mn MMcf BFG) / 24 hours}$

Mercury Hourly Stove emissions = $BFG_{TA} \times \text{Hg Test Factor (in pound mercury per MMcf BFG)} / 8760 \text{ hours per 12-month rolling time period}$

Lead Hourly Stove emissions = $BFG_{TA} \times \text{Pb Test Factor (in pound Pb per mmcf BFG)} / 8760 \text{ hours per 12-month rolling time period}$

Where:

NOx Test Factors are individual stove emission factors based on B-FCE and C-FCE stack test results.

CO, PM, PM-10, Mn, Pb, and Hg Test Factors are emission factors based upon available site specific stack test data for C-FCE. Permit data will also be evaluated in determining the appropriateness of these factors.

BFG_{BA} = actual total Blast Furnace Gas combustion rate for the previous 12-month rolling time period in MMcf BFG for B-FCE.

BFG_{CA} = actual total Blast Furnace Gas combustion rate for the previous 12-month rolling time period in MMcf BFG for C-FCE.

BFG_{TD} = actual total Blast Furnace Gas combustion rate on a daily basis, based on a calendar week average, in MMcf BFG for B-FCE and C-FCE combined.

BFG_{TM} = actual total Blast Furnace Gas combustion rate for the previous month in MMcf BFG for B-FCE and C-FCE combined.

BFG_{TA} = actual total Blast Furnace Gas combustion rate for the previous 12-month rolling time period in MMcf BFG for B-FCE and C-FCE combined.

1-7.9 The permittee shall use the following calculations to determine compliance with the recordkeeping requirements referenced in FGB&CSTOVES (for SO₂ emissions):

SO₂ Hourly Stove emissions = $BFG_{TD} \times \text{SO}_2 \text{ Daily Emission Factor} / 24 \text{ hours}$

SO₂ Annual Stove emissions = $\sum_{i=1}^{n=365} (BFG_{TD} \times \text{SO}_2 \text{ Daily Emission Factor}) / 2,000 \text{ lb/ton}$

Where:

BFG_{TD} = actual daily total of BFG (in MMcf) combusted in B-FCE and C-FCE combined

SO₂ Daily Emission Factor = SO₂ Emission Factor derived on a daily basis from the SO₂ CEMS data provided by the SO₂ CEMS on the C-FCE stoves.

The factor will be in pound SO₂ per MMcf BFG and will be calculated either directly by the CEMS or by taking the daily pounds of SO₂ from C-FCE stoves (from the CEMS) and dividing this by the amount of BFG (in MMcf) combusted in C-FCE in the same day.

Appendix 1-8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Appendix 1-9. Fugitive Dust Control Plan (Severstal Dearborn, LLC – Rouge Area Operations and Particulate Emission Control Program)

A. STORAGE AND ACCESS AREAS

1. Materials such as coke, iron ore, coal, limestone, sand, coke screenings and sump breeze are stored in piles in the field. All piles are active except coke, coal, and limestone. The active piles will be treated with either an asphalt emulsion, petroleum resin, or an acrylic cement, once per month, March through October. Inactive piles will be treated with asphalt emulsion, petroleum resin, or an acrylic cement, once per year. An inactive pile is defined as a pile which is disturbed less than once per month.
2. Normal access areas surrounding storage piles will be treated with asphalt emulsion, petroleum resin, or an acrylic cement, once per month from March through October.
3. When reclaiming of materials is done with a front end loader, the clearance between the bottom of the loader bucket and the vehicle sideboard will be maintained at two feet maximum during loading.
4. When loading coke into trucks or railroad cars at DD building with conveyors, the awaiting vehicle shall be equipped with water sprays to control dust during the loading operation.

B. OPEN AREAS AND UNPAVED ROADS.

1. Open areas will be treated with asphalt emulsion, petroleum resin, or an acrylic cement, once per month between March and October.
2. Unpaved roads will be treated with asphalt emulsion, petroleum resin, or an acrylic cement, once every 12 days between March and October.

C. PAVED AREAS.

1. Wet sweeping

- (i) Roadways receiving wet sweeper treatments on a daily schedule, 5 days a week between March and October, are listed in figure 2 attached to the consent order.
- (ii) The traveled portion of parking areas will receive wet sweep treatments once per month. A greater frequency rate will be implemented on these areas if warranted due to extended dry weather. The non-traveled portion of parking lots will be swept and cleaned a minimum of three times per year.
- (iii) Materials and debris picked up during wet sweep activities will be transported and deposited in a designated holding site by the sweeper equipment operator. Sweeping debris material piles will be monitored on a daily basis and control measures implemented to further reduce fugitive dust emission potential.

2. Street flushing

All paved roadways in the Rouge facility will receive flusher treatments on a daily schedule, five days a week between March and October of the year when outside temperatures are above freezing. Roadway assignments and respective application frequencies are shown in figure 2 attached to the consent order. Daily flusher treatments are assigned to roadways.

3. Schedule change

Roadway treatment application schedules presented in this plan may be modified on a short term basis in response to adverse meteorological conditions or unusual circumstances. Daily treatment procedures will be foregone when:

- Daily precipitation exceeds 0.1 in.
- Freezing is a concern.
- Road salt is applied and for 48 hours thereafter.

4. Additional measures

- (i) To control dust during scheduled raw material handling, a flusher vehicle will sprinkle the truck hauling route.
- (ii) Speed signs have been posted on major paved roadways throughout the facility to maintain lower vehicular speeds. Maximum posted limit is 20 mph.

D. **DUST SUPPRESSANT**

The suppressant used will be an acrylic cement, petroleum resin, or an asphalt emulsion. It is diluted with water in a ratio of not more than 9:1 and applied at a rate of 0.3 gallons of solution per square yard of surface area covered throughout the plant (all sources). **(Act 451 Section 324.5524, Consent order SIP 30-1993)**

E. The permittee may change its operations and processes that are sources of particulate and fugitive dust and may also change the provisions under Appendix 01.9, Paragraph A – D of this permit provided all of the following conditions are met:

- a. The provisions of the control program continue to apply to the subject operation or process;
- b. The change does not result in an increase in the level of fugitive dust or particulate emissions;
- c. The operation or process change is approved by MDEQ;
- d. The permittee submits a written description of the proposed operation or process change and how it meets the requirements of conditions a. and b above. **(Consent Order SIP 30-1993, Paragraph 13(A))**

F. The permittee may revise the fugitive dust control program and/or the particulate emission control program provided all of the following conditions are met:

- a. The permittee demonstrates, in writing, that the proposed revision does not result in an increase in the level of fugitive dust or particulate emissions and submits the demonstration to MDEQ for approval.
- b. The revision is approved by MDEQ. **(Consent Order SIP 30-1993, Paragraph 13(B))**

MARCH 2, 2012 PROPOSED

**STATE OF MICHIGAN
RENEWABLE OPERATING PERMIT**

SECTION 2

EDW. C. LEVY CO.

LOCATED AT

**4001 MILLER ROAD
DEARBORN, MI 48121**

Permit Number: MI-ROP-A8640-200X
SECTION 2

Effective Date:

Expiration Date:

A-2. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state only enforceable Source-wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in federally enforceable Source- wide PTI No. MI-PTI-A8640-201X pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq.,

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part):**
 - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent opacity.
 - b. A limit specified by an applicable federal new source performance standard.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b))**:
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A responsible official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:

- a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA. **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**

28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR, Part 82, Subpart F.
37. If the permittee is subject to 40 CFR, Part 82, and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR, Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR, Part 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR, Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall comply with the requirements of 40 CFR, Part 68, no later than the latest of the following dates as provided in 40 CFR, Part 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR, Part 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR, Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR, Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR, Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B-2. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to Section 2 of the stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

SOURCE-WIDE CONDITIONS SECTION 2

DESCRIPTION: Requirements applicable to blast furnace pit area and blast furnace alley area

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	20%	3-minute average	Opacity of fugitive dust emissions from sources other than roads, lots, or storage piles. This shall not apply to storage pile material Handling activities when wind speeds are in excess of 25 miles per hour.	Method 9D, VI.2	Act 451 Section 324.5524(2)
2. Opacity	5%	3-minute average	Opacity of fugitive dust emissions from any road, lot or storage piles, including any material handling activity at a storage pile. This shall not apply to storage pile material handling activities when wind speeds are in excess of 25 miles per hour.	Method 9D, VI.2	Act 451 Section 324.5524(2)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

A. PROCESS CONTROL MEASURES

1. To minimize the fugitive emissions from the loading of trucks and the transporting of material off-site, the following operating practices shall be adhered to:
 - a. All trucks transporting finished product with the potential to emit fugitive particulates shall be tarped before leaving the property.
 - b. Drop heights of the front end loader bucket will be no more than two (2) feet above sideboard of the trucks.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.A)

2. Control of emissions due to vehicle movement about the stockpiles shall be accomplished by applying lignosulfonate or an equivalent or more effective material to the traveled areas among the piles. When lignosulfonate is used, the application rate of 5 gal/100 sq. ft. shall be used, the diluted ratio shall be 3:1, and the application frequency shall be once per month. The actual square footage to be controlled shall be dependent upon the amount of material in storage.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.A)

3. Spilled material under conveyors shall be attended to on an ongoing basis. Spillage on roadways shall be removed daily. A truck operator who has spilled material onto the road shall be notified so that appropriate action can be taken to prevent future incidences.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.A)

B. STOCKPILE AREAS and ACTIVITIES.

1. Raw slag shall be watered prior to transfer by front end loader to the grizzly/feeder at the beginning of the process plant. Water is added to the material at a rate of 4.0 gallons per ton of slag processed.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.B)

2. Load-out emissions shall be controlled by limiting drop height of the bucket to a maximum of two (2) feet above the sideboard of the truck.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.B)

C. ROADWAYS AND PARKING LOTS

1. Paved Roads

- a. Paved roads shall be cleaned as necessary, during operating hours, weather permitting, with a power flush or wet/vacuum truck.

- b. Track-out shall be cleaned up daily when it occurs.

- c. Speed limit on paved roads is 15 MPH.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.C)

2. Unpaved Roads

- a. Unpaved roads shall be treated with a lignosulfonate (or equivalent) dust suppressant. If lignosulfate is used, the application rate shall be no less than 0.45 gallons of solution per square yard with dilution ratio of 3:1.

- b. Speed limit on unpaved roads is 5 MPH.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.C)

D. PROCESS EMISSIONS (Crushing, Screening, Conveying, and Transfer)

1. Crushing / Screening operations shall be equipped with water sprays for fugitive dust control. Materials shall be wetted with water sprays prior to entering the crushing/screening operations.

2. Conveying and transferring for those conveyors and transfer points covered under Exhibit A shall be equipped with covered conveyors, water sprays, side shields, or scope for fugitive dust control as described under 3.A and D..

3. Load-out emission shall be controlled by limited drop height to a maximum of two (2) feet above the sideboard of the truck. All trucks transporting finished products with the potential to emit fugitive particulate shall be tarped.

(Consent Order SIP 18-1993 (Revised 9/9/94), Exhibit A, Section 3.D)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall record the data and information specified in Appendix 2-4, Section 2-4.1. Required Records for Fugitive Dust Sources and shall keep the record for a period of at least two years, and shall be made available to AQD upon written or verbal request. The permittee may use alternate formats with the approval by the AQD District Supervisor for recording equivalent information without the need to modify or amend this permit **(Consent Order SIP 18-1993, (Revised 9/9/94), Exhibit A, Addendum), R 336.1213(3))**
2. The permittee shall perform a non-certified visible emission observation of the fugitive dust sources at least 5 days per week, excluding non operating days during March through October. The permittee shall perform a certified visible emission observation of a representative set of the fugitive dust sources mentioned in Appendix 2-4 of this permit at least once per month during March through October. The representative set must include a paved road, an unpaved road, and a storage pile. A different set of fugitive dust sources must be observed each month. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
3. The permittee shall implement and maintain the Hydrogen Sulfide Monitoring Protocol for Rule 406 submitted and approved by AQD on April 1, 2011 or any subsequent amendment to the protocol. Amendments to the protocol must be approved by the Southeast Michigan Air Quality Division (AQD) Supervisor. If, at any time, the AQD determines that the protocol is inadequate, the permittee shall amend the protocol within 45 days upon request from the AQD District Supervisor. **(R 336.1406(2), R 336.1213(3))**

See Appendix 2-4.1 and 2-9

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by May 15 for reporting period July 1 to December 31 and November 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by May 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Quarterly report shall be submitted by the permittee to AQD identifying each day in which emission limit, operational requirement, or recording requirement, as specified in SIP No. 18-1993 (Revised 9/9/94) Exhibit A (Fugitive Dust Control Plan), were not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or record keeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. These reports shall be submitted within 30 days following the end of the calendar quarter in which the data were collected. **(Consent Order SIP 18-1993 (Revised 9/9/94), Paragraph 11)**

See Appendix 2-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of the conditions as the date upon which the Termination Order is signed by the Chief of the AQD. **(R 336.1213(3))**
2. Each responsible official shall certify annually the compliance status of the stationary source with all stationary source-wide conditions. This certification shall be included as part of the annual certification of compliance as required in the General Conditions in Part A and Rule 213(4)(c). **(R 336.1213(4)(c))**
3. When the odor of hydrogen sulfide is found to exist beyond the property line of Severstal Dearborn, LLC, the permittee shall not cause or allow the concentration of hydrogen sulfide to exceed 0.005 parts per million by volume for a maximum period of 2 minutes. **(R 336.1406(2))**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

C-2. EMISSION UNIT CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBLSTFCESLAGPIT	Edw. C. Levy Co. dumps pots containing blast furnace slag collected from the Blast furnaces. Dumped slag is quenched with water sprays containing potassium permanganate, or an equivalent agent, to control odor. After thorough quenching, Edw. C. Levy Co. loads the material into trucks for processing off - site.	1/31/91	NA
EURUNWAYSAGWTR	BOF runway slag watering station is located on southeast side of the EAF building. Levy digs the runway slag with a front-end loader and the slag is put into either euclids or slag pots. The runway slag is transported to the watering station for dust control. After watering, the material is further processed.	5/09/97	NA

EUBLSTFCESLAGPIT

EMISSION UNIT CONDITIONS

DESCRIPTION Edw. C. Levy Co. dumps pots containing blast furnace slag collected from the Blast furnaces. Dumped slag is quenched with water sprays containing potassium permanganate, or an equivalent agent, to control odor. After thorough quenching, Edw. C. Levy Co. loads the material into trucks for processing off-site.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Water sprays

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
Opacity	20%	3-minute average	Slag dumping or digging area	Method 9D, VI.1, VI.2	Act 451 Section 324.5524(2)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall quench the dumped slag by water sprays before digging. **(Consent Order SIP 18-1993, (Revised 9/9/94), Exhibit A, Section 3.A)**
2. The permittee shall reduce hydrogen sulfide emissions generated at the blast furnace slag pits servicing Severstal's Blast Furnaces B and C by installing and properly maintaining the potassium permanganate or equivalent agent quenching system². **(R 336.1910, R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall perform a Method 9 certified visible emission observation of a representative slag dumping or digging operation at least once every two weeks for a minimum of 15 minutes during dumping or digging operation. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. **(R 336.1213(3))**
2. Permittee shall conduct periodic inspections for the purpose of determining the operational condition of the water spray systems on slag pits dumping area, and if necessary, the reasons for malfunction or failure. These inspections shall be conducted during scheduled outages or downtimes, and immediately after observing visible emissions, but not less frequently than at least once a month and shall keep a written record of each inspection and corrective action taken if any. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by May 15 for reporting period July 1 to December 31 and November 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by May 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 2-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EURUNWAYS LAGWTR

EMISSION UNIT CONDITIONS

DESCRIPTION BOF runway slag watering station is located on southeast side of the EAF building. Levy digs the runway slag with a front-end loader and the slag is put into either euclids or slag pots. The runway slag is transported to the watering station for dust control. After watering, the material is further processed.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT Water sprays

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
Opacity	20%	3-minute average	Runway slag watering station	Method 9D, VI.1	Act 451 Section 324.5524(2)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not further process the runway slag outside the BOF building without wetting the material thoroughly with the water spray system² (R 336.1910, R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall perform a Method 9 certified visible emission observation of the runway slag watering station at least once every quarter of the year for a minimum of 15 minutes during the dumping, watering and loading operation. The permittee shall initiate corrective action upon observation of visible emissions in excess of the applicable visible emission limitation and shall keep a written record of each required observation and corrective action taken. (R 336.1213(3))
2. The permittee shall keep a Runway BOF slag pot dump report on a 24-hour daily basis. The report shall include the following:
 - a. Date
 - b. Runway BOF Slag Dump Time

- c. Water time
 - d. Dig Time
- (R 336.1213(3))**

VI. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by May 15 for reporting period July 1 to December 31 and November 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by May 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 2-8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D-2. FLEXIBLE GROUP CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

E-2. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 2-1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H ₂ S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO ₂	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

Appendix 2-2. Schedule of Compliance

The permittee certified in this ROP application that this stationary source is in compliance with all applicable requirements of this ROP. However, the permittee is allegedly in non compliance with A-2. General Condition.12 (a) & (b). As a result, the permittee was required to submit a Schedule of Compliance as defined in Rule 119(a), pursuant to Rule 210(2) and Rule 213(4).

A Schedule of Compliance for any applicable requirements that the permittee is not in compliance with at the time of the ROP issuance is supplemental to, and shall not sanction non-compliance with, the underlying applicable requirements on which it is based.

The permittee shall adhere to this schedule of compliance and submit the required certified progress reports accordingly.

Compliance Plan

The permittee outlined the details of achieving compliance in a narrative compliance plan. The details of the compliance plan are outlined below.

As reflected in the Schedule of Compliance below, the permittee shall implement corrective measures to reduce the sourcewide potential for particulate fallout and incorporate those measures into an enforceable Consent Order and the Renewable Operating Permit. Corrective measures include implementation of the fallout mitigation plan submitted by Severstal on December 4, 2010 and approved by MDEQ on March 24, 2011.

Schedule of Compliance

The following schedule of compliance conforms to the provisions of Rule 119(a) and Rule 213(4).

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
SOURCEWIDE CONDITIONS	A-1. General Condition.12(a) & (b)	Implement corrective measures to address potential sources of particulate fallout and include measures in an AQD consent order and incorporate into the ROP	Implement December 4, 2010 fallout mitigation plan as agreed upon between Permittee and AQD per MDEQ letter on March 24, 2011	Within 8 months of ROP or Consent Order issuance whichever occurs first or alternate timeline approved by AQD District Supervisor	Quarterly - The 15 th of the month following the end of the quarter
			Provide additional information requested by the AQD within the timeframe specified by AQD staff	As requested	N/A

Emission Unit/ Flexible Group ID and Condition No.	Applicable Requirement	Remedial Measure	Required Action	Milestone Date	Progress Reports
			Incorporate acceptable corrective measures into an enforceable Consent Order Submit application to modify the ROP in accordance with the requirements of R 336.1216	Effective date of AQD Consent Order Within 60 calendar days of the effective date of the Consent Order	Quarterly - The 15 th of the month following the end of the quarter

Progress Reports

The permittee shall submit Certified Progress Reports to the appropriate AQD District Supervisor using the MDEQ Report Certification form (EQP 5736). Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor. **(R 336.1213(4)(b))**

Progress reports shall contain the following information:

The projected dates for achieving scheduled activities, milestones or compliance as required in the schedule of compliance. **(R 336.1213(4)(b)(i))**

The actual dates that the activities, milestones, or compliance are achieved. **(R 336.1213(4)(b)(i))**

An explanation of why any dates in the schedule of compliance were not or will not be met. **(R 336.1213(4)(b)(ii))**

A description of any preventative or corrective measures adopted in order to ensure that the schedule of compliance is met. **(R 336.1213(4)(b)(ii))**

Appendix 2-3. Monitoring Requirements

Specific monitoring requirement procedures, methods or specifications are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 2-4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in the Conditions for the requirements applicable to blast furnace pit area and blast furnace alley area for Section 2 of this ROP. Alternative formats must be approved by the AQD District Supervisor.

2-4.1 Required Records for Fugitive Dust Sources

- A. Unpaved Roads / Lots
 - 1. Date of Treatment
 - 2. Control Measure Used
 - 3. Responsible Person's Initial

4. Name of Product Applied
5. Amount of Solution / Water Applied
6. Dilution Ratio
7. Road Segment / Lot Identification

B. Paved Roads / Lots

1. Date of Treatment
2. Control Measure Used
3. Responsible Person's Initial
4. Road Segment / Lot Identification

C. Storage Piles / Material Handling

1. Date of Treatment
2. Control Measure Used
3. Responsible Person's Initial
4. Dilution Ratio
5. Amount of Dust Suppressant / Water Applied
6. Identification of Pile / Material Handling Operation Treated
7. Equipment Used

Appendix 2-5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 2-6. Permits to Install

The following table lists any PTIs issued since the effective date of previously issued ROP No. 199700004.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA

Appendix 2-7. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

Appendix 2-8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDEQ Report Certification form (EQP 5736) and MDEQ Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.